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ABSTRACT

The handbook contains information for teachers, students, and parents which should assist in making Jefferson County Public Schools' resident environmental education program a beneficial experience for all concerned. Descriptions of the various camping facilities near Lexington are presented to aid in camp selection. A check list is given for the teacher as well as suggested menus, money raising ideas, scheduling the day, and ideas for activities (taking a closer look on a hike, activities for base camp, high adventure activities, and rainy days). Guidelines are suggested for handling the excitement of lights out; preparing for and following up the resident experience; and evaluating the experience by parents, students, and teachers. A list of environmental education organizations and a bibliography are included. Sample forms are provided for parents concerning field trip permission and release, kinds of clothing recommended, medical information, interest solicitation, and general trip information. Worksheets for students include mini-forest study, leaf study, history found in a cemetary, animal classification, a scavenger hunt, bird watching, pond discovery, and games and puzzles. Parent and student post-camp questionnaires, answer keys, and information on library material selection and adoption procedures conclude the document. (BRR)

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Handbook for Residential Environmental Education

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Jefferson County Public Schools
Louisville, Kentucky

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HANDBOOK FOR RESIDENT ENVIRONMENTAL EDUCATION

July 1982

JEFFERSON COUNTY PUBLIC SCHOOLS

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Jefferson County Board of Education
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SUPERINTENDENT'S MESSAGE

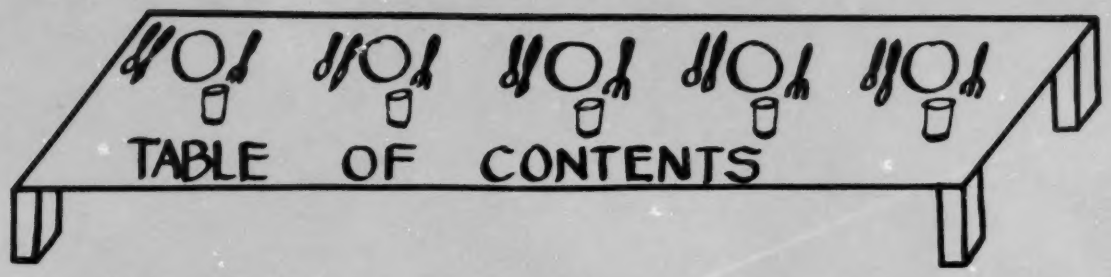
The Jefferson County Public Schools is dedicated to setting and achieving a standard of educational excellence for all students whom the system serves.

This standard responds to three interfacing documents, the Jefferson County Public Schools Philosophy of Education which promotes self-realization in a free society, the Learner Goals which proclaim the community's educational values, and the District Comprehensive Educational Plan which provides the Board of Education's commitment of resources.

Providing this standard of educational excellence is an ongoing and evolving process of assessment, development, and evaluation. It is professionals attending the cognitive and affective needs of the students. It emphasizes curriculum and curriculum-related processes.

The school system uses feedback and evaluation data, including professional staff opinion and test scores to identify programmatic needs and to assess the achievement of stated objectives. Since curriculum development is characterized by continuous change and adaptation, we urge all interested persons to make their concerns known, thus ensuring continuing community input.

Donald W. Ingwerson, Ed.D., Superintendent
Jefferson County Public Schools



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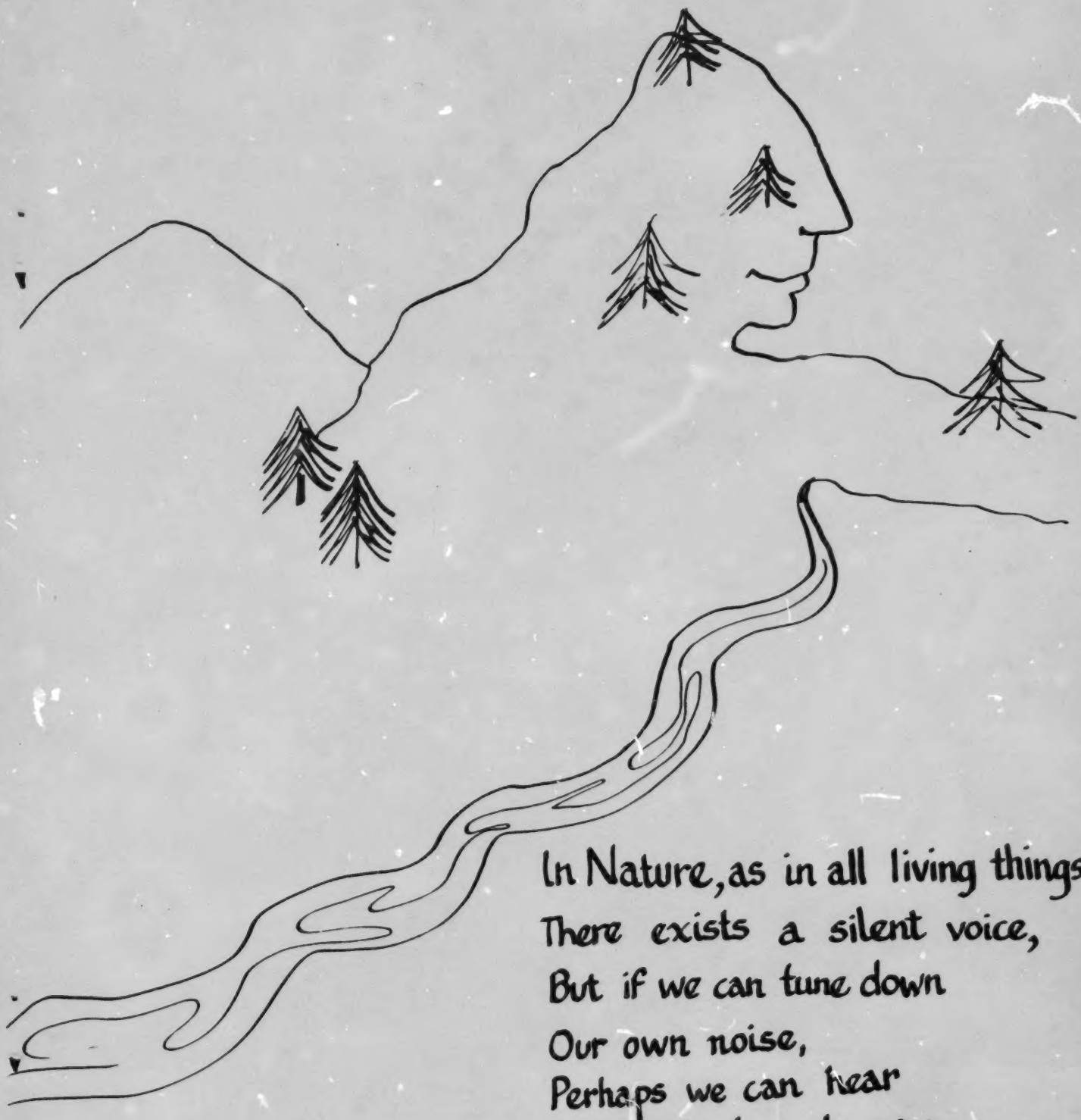
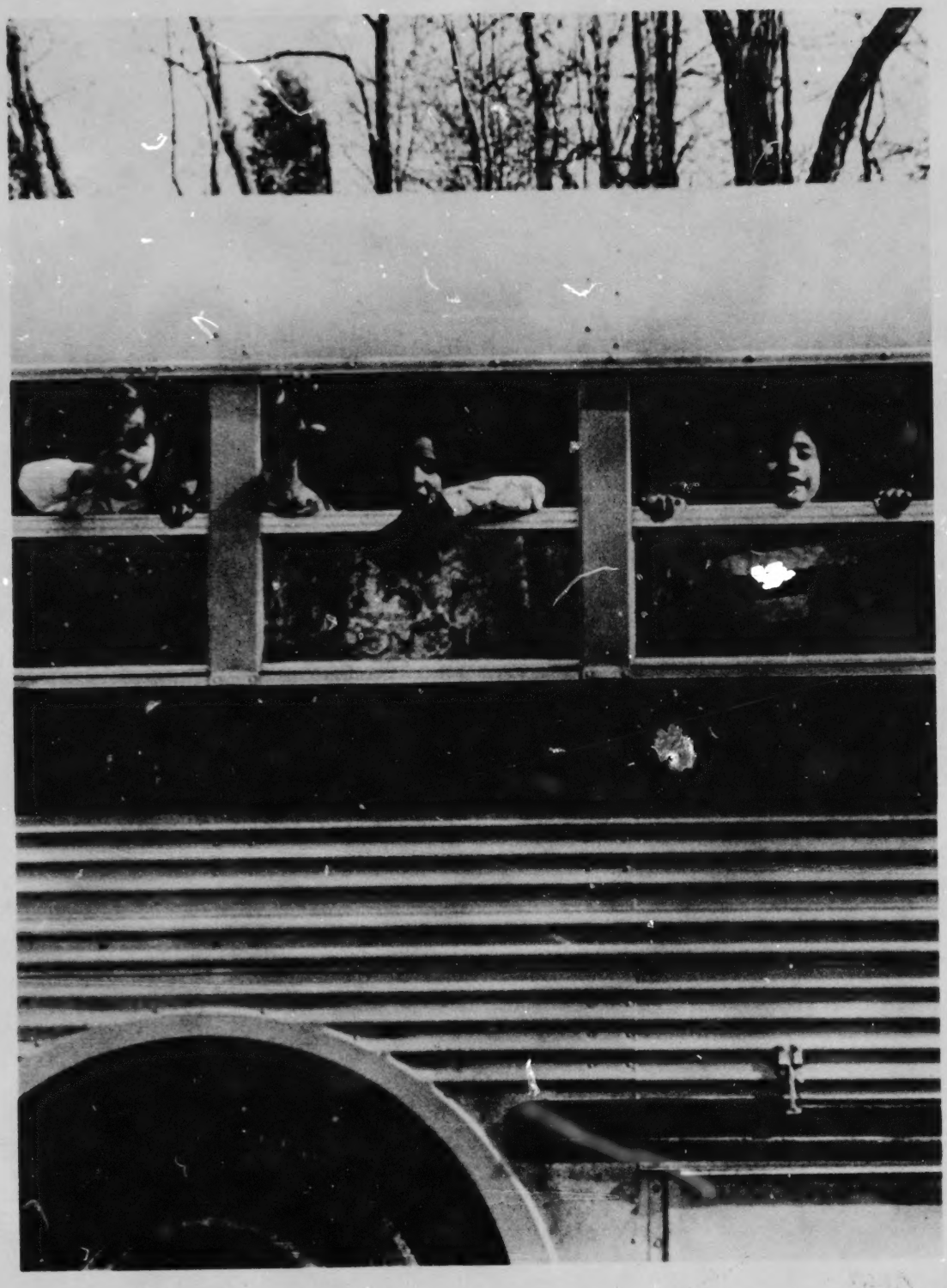


In Nature, as in all living things
There exists a silent voice,
But if we can tune down
Our own noise,
Perhaps we can hear
What she has to say.

~Patty Smith



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PHILOSOPHY

LAYING THE GROUNDWORK

The resident environmental education program is based on the following objectives which ensure its value as an educational experience:

To increase appreciation of the complexity, interrelatedness, and beauty of our natural environment.

To provide learning activities in real-life situations, and to add to students' background experience.

To provide opportunities for students to learn some functions of community living and cooperation in a setting away from home.

To help students to grow in understanding of adults and their teacher in a relaxed atmosphere.

To help students to improve their attitudes toward learning, towards their peers and their own self-concept.

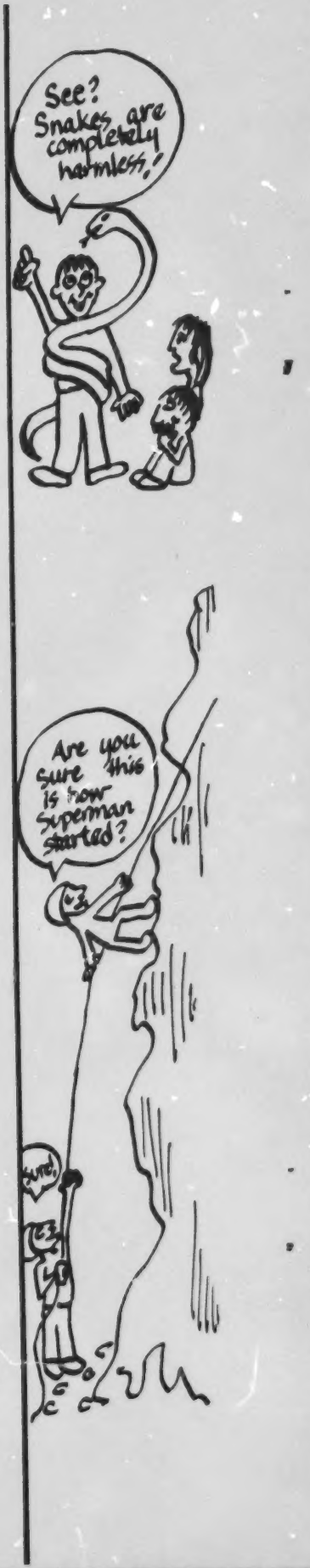
Children are naturally curious about their world and need a continuous program of first-hand experiences to develop an awareness of their relationship to their environment. Environmental education experiences help students establish positive attitudes and actions which can become habits.

The curriculum possibilities at a resident outdoor education program have few boundaries. Since the children are in residence there for only a few days, one cannot hope to teach a great volume of facts. It is, therefore, necessary to select within a certain content area and to integrate the studies with the total curriculum. Students are at the site for twenty-four hours a day; therefore, every moment of the day or night is a part of the curriculum. Resident outdoor education should be an ongoing part of the school year and closely related to what takes place in the indoor classroom.

Teachers and students all have something to contribute and something to learn. The exploratory teaching approach implies that the student knows something before the class begins.

Students should be able to explore, find examples, and then use any senses appropriate to observe the differences and beauties of their discoveries.

Teachers should take advantage of teachable moments. When a turtle is found, it is time to talk about turtles. These unforeseen discoveries add zest to the planned curriculum.



-- Relating to our environment in a positive way is a life-long task for all persons called "humans." Resident environmental programs provide all learners with experiences that integrate the academic, social, and emotional areas of growth.

Teachers who take the challenge to try outdoor programs usually find the effort is well worth the work!

Ann Hager
Jeffersontown Elementary

-- Taking my kids to camp is the most rewarding thing I do all year. It gives my class and me a chance to learn how to live together for two nights and three days. New relationships are formed. We learn how to operate as a group. Many lives are changed forever.

Mike Miller
Hazelwood Elementary

-- My objectives are those of the subjects being taught. I simply go outside my classroom to learn and teach those things which can be best learned and taught there. My love for the out-of-doors and facilitating growth and development in my students became the same thing.

Mary Gaebler
Thomas Jefferson Middle School

-- My three days at Otter Creek are the happiest three days of each year. Going in the fall gives me a wonderful opportunity to really get to know the children, and it gives them a chance to really get to know me.

It is also a time when the very shy child might blossom or the troublemaker might discover that learning can be fun.

Exploring the outdoors gives the children a chance to get in touch with nature and to discover a whole new atmosphere for learning.

Linda Toon
Mill Creek Elementary

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JEFFERSON COUNTY PUBLIC SCHOOLS PHILOSOPHY

WE BELIEVE . . .

That each person is of worth, is endowed with human dignity, is unique, and is entitled to respect as an individual.

That self-realization, self-discipline, quality in human relationships, and appreciation for one's cultural heritage are essential to the full development of the individual.

That the contributions of our diverse backgrounds—racial, ethnic, religious, social, economic, and political—are essential to the strength and richness of our society.

That the correlation of these backgrounds in our school system, both in curriculum and in practice, is necessary and essential to quality education.

That the freedoms guaranteed by the Constitution of the United States and by the Bill of Rights are essential to a democratic society and that all persons need to understand both the privileges and the responsibilities of citizenship.

That since we live in a changing world, all persons need to be prepared to meet, evaluate, and adjust to change creatively and intelligently.

That effective education comes from a responsible and mutual effort on the part of the school, the church, the family, and the community-at-large. This includes sharing in the determination of goals and in providing necessary resources.

That the school, student, family, and the community-at-large need to realize the significant role played by the other in the educative process.

That the public school is a fundamental part of our tradition and has a responsibility to the individual and the society in which we live.

WE BELIEVE THAT IT IS THE GOAL OF OUR SCHOOLS . . .

To provide education at the earliest appropriate age and to seek and identify the needs of each individual student on a continuing basis.

To provide the necessary tools and incentives to assure each student the highest quality of education.

To provide the necessary programs, training, and qualified and supportive personnel to motivate all students to achieve according to their individual learning patterns and rates of growth in order to realize their maximum potentials intellectually, economically, socially, culturally, and physically.

To provide a climate wherein the uniqueness of the cultures that each individual brings to the classroom setting is positively received.

To provide the structures, policies, and practices that reflect the multi-ethnic nature of our community through the composition of administrative staff, faculties, and student bodies.

WE BELIEVE . . .

That the philosophy of education of the Jefferson County Public Schools must be regularly reevaluated by the schools, students, parents, and the community-at-large.

Where do you go for help and information?

1. Contact the offices of Elementary Education and Middle School Education for inservice information or resource help from Central Office personnel.

2. Contact the Project Innovative Diversion (Project I.D.) office for information about the support personnel and services they can provide. Project ID is a diversified wilderness program sponsored by the Jefferson County Public Schools. It is located at the Durrett Annex. Call 367-6044.

3. Contact one of the teachers listed below. They are experienced campers.

Name	School	Grade
Mary Holden	Roosevelt-Perry Elementary	K
Linda Toone	Mill Creek Elementary	1
Johanna Hounschall	Brown School	2
Ann Hager	Jeffersontown Elementary	4
Mike Miller	Hazelwood Elementary	4
Dorothy Roland	Coleridge-Taylor Elementary	
Jane Charmoli	Kenwood Elementary	5
Mary Lou Loughran	Klondike Elementary	5
Mary Lou Vittitow	Lowe Elementary	5
Joe Spagnolo	Noe Middle	6-8
Neal Deaves	Westport Road Middle	6-8
Brad Matthews	Noe Middle	6
Dennis Boswell	Noe Middle	6-8
Mary Gaebler	Thomas Jefferson Middle	7-12 Special Education
Jim Ballard	Fairdale High School	10-12
Sherril Travis	Noe Middle	Multi-age
Susan Sweitzer	Project Way-Out	BD
Debbie Ricks	Mill Creek Elementary	OH
Jane Bruce	Mill Creek Elementary	OH
Jean Langdon	Mill Creek Elementary	LD
Sherry Fox	Jeffersontown High School	9-12

- ☐ 1. Visit the site and attend available workshops before making any plans.
- ☐ 2. Check with the principal concerning your plans to take a trip. The principal must obtain permission from the regional superintendent before you may proceed with plans for the trip. See Jefferson County Public Schools policy IICAA and IGAL, p.4.
- ☐ 3. Check the availability of the site and make tentative date commitments.
- ☐ 4. Introduce to the students the subject material to be included at the resident program (leaf and plant identification, ecology, plant and animal sightings, classification).
- ☐ 5. Write a letter to the parents describing the initial plans and inviting them to a meeting.
- ☐ 6. Meet with parents. Ask for volunteers. (One adult per eight students is recommended.)

  Suggested Agenda for Parent Meeting:

  I. Why You Want To Go
  II. Experiences You Want Students To Have
  III. Resource People Already Involved--Include Numbers Of Parents who volunteered
  IV. Safety precautions to be taken
  - A. Insurance
  - B. Classes in first aid
  - C. Emergency medical services available

  V. Cost
  - A. Transportation
  - B. Food
  - C. Lodging

- ☐ 7. Contact the camp and confirm the dates.
- ☐ 8. Determine approximate cost, and arrange the funding.
- ☐ 9. Notify any resource people of the dates you will need them.
- ☐ 10. Meet with the lunchroom manager and a representative from Food Services to plan menus.

- [ ] 11. Make transportation arrangements.
- [ ] 12. Plan with teachers for an effective schedule of operation, and select activities the class will be involved in while at camp.
- [ ] 13. Contact an insurance company for coverage.
- [ ] 14. Meet with the adults who have volunteered to go to camp.
- [ ] 15. Purchase necessary supplies.
- [ ] 16. Learn songs and stories to be used around a campfire.
- [ ] 17. Collect necessary equipment and cooking supplies.
- [ ] 18. Make work packets for students who cannot go to camp. Make arrangements for other teacher(s) to have your students stay in their classroom(s) during your absence.
- [ ] 19. Assemble a first-aid kit.
- [ ] 20. Notify any teachers who will be affected by the absence of the class.
- [ ] 21. Two weeks prior to leaving, send a final letter home with the permission form, the medical information form, and a list of needed equipment. File the returned permission slips in the school office. Take to camp a complete list of students' names and phone numbers and the medical forms.
- [ ] 22. Arrange with parents for any required medication.
- [ ] 23. Make a list of needed equipment and supplies; check off as they are packed. (This list should be kept to check when packing to return to school.)
- [ ] 24. Identify all boxes for delivery (e.g., kitchen, lodge, classroom).
- [ ] 25. Be sure that all adults have copies of the schedules and maps of the area, and understand them.

JCPS POLICY: IICAA

OVERNIGHT TRIPS

The board of education sanctions trips by student organizations when such trips are directly related to the school program. Parental approval and proper insurance coverage of students are required, and the trip shall be properly supervised. A teacher or administrator shall accompany students on all trips. Specific procedures for planning and evaluating overnight trips shall be designed by the Department of School Programs. Overnight trips by students require approval of the regional superintendent.

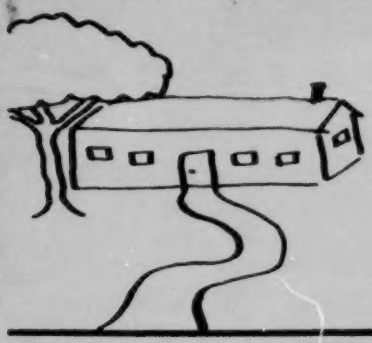
Adopted: October 22, 1979, Motion #12983

JCPS POLICY: IGAL

ENVIRONMENTAL EDUCATION

The board of education shall integrate into the instructional program at all grade levels in appropriate subject areas studies relating to ecology and the environment.

Adopted: October 22, 1979, Motion # 12983



FACILITIES

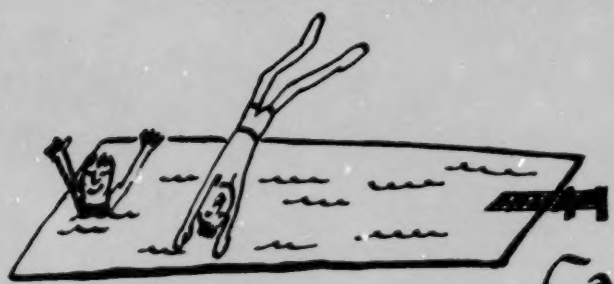
OTTER CREEK PARK

Otter Creek Park is a city of Louisville public park thirty-five miles southwest of the city. The city maintains and operates all the facilities in the park, including the four camps and lodges described below. The park has a nature center which presents by reservation a fine program. Schedule your class for this program far in advance. Contact the Otter Creek Park office at 583-3577 to reserve any camp or cabin except Camp Piomingo. The St. Matthews Young Men's Christian Association (Y.M.C.A.) leases the camp and operates its programs.

Camp Piomingo

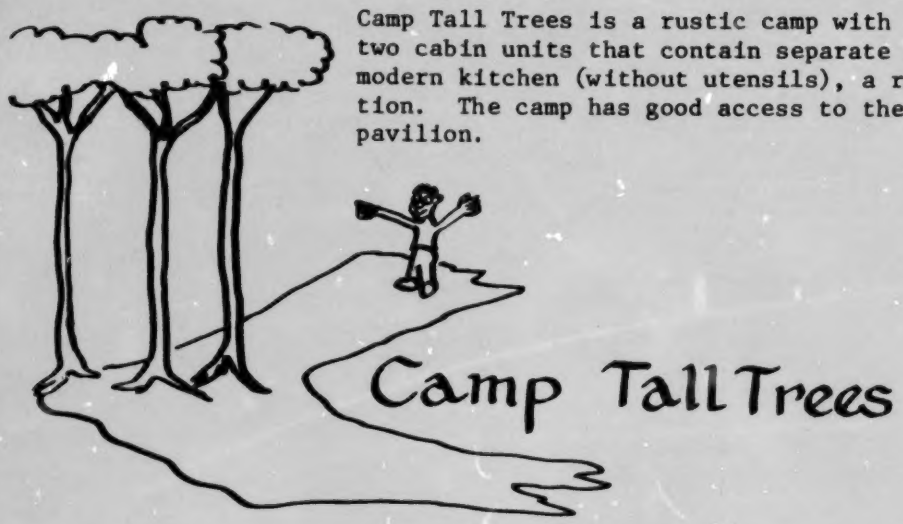
All camps cost three dollars a night and require a deposit in advance. Reserve your camping dates as far in advance as possible.

Piomingo, the largest camp in Otter Creek Park, has a 200 student capacity. It is made up of five independent units with eight to ten small cabins. Each unit has a bathhouse, lodge and fire ring. The camp site has a centrally located modern kitchen facility, a large recreation hall, craft cabins, ball fields, open air auditorium, and bonfire locations. Camp Piomingo is the only camp which will provide food service. To reserve Camp Piomingo call the St. Matthews Y.M.C.A. at 895-2443.



Camp Tecumseh

Camp Tecumseh is the newest camp and has a capacity of 80 campers. It is the only camp with heated cabins but is the least rustic. All cabins are close together and connected with sidewalks. There is a common bathroom facility, a recreation hall with fireplace, a complete kitchen, and a dining room. You may rent kitchen utensils, dishes, and silverware.

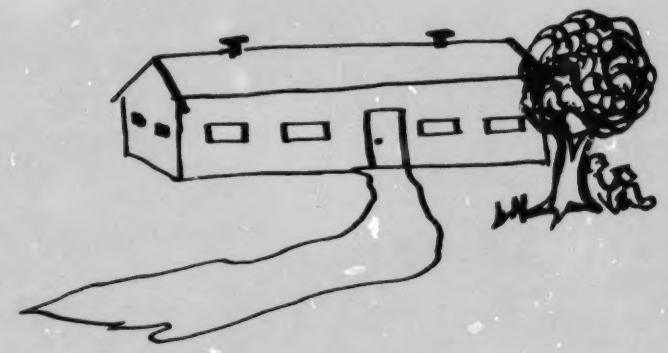


Camp Tall Trees is a rustic camp with a capacity of 100 campers. It has two cabin units that contain separate bathhouses. It has a complete modern kitchen (without utensils), a recreation hall, and bonfire location. The camp has good access to the visitor center and the pine grove pavilion.

The Camp Sky-Hi facility is similar to Tall Trees. It is located away from park resources but in a beautiful isolated spot right on Otter Creek.

In addition to the camps Otter Creek has three group cabins available.

Cabins



Camp Kimbo

This rustic cabin has one room with sixteen bunk beds, picnic tables, and two wood stoves. Pit toilets, a fireplace, and a pump are outside. A flat fee of $30 is charged. It is a good location for small groups that want to be secluded.

Haven Hill Lodge

This is a modern cabin with complete kitchen and utensils and spacious meeting rooms downstairs. Upstairs there are five rooms with three or four bunk beds each, as well as modern bathroom facilities. The building is heated with forced air heat.

Van Buren Lodge

This is a beautiful log cabin with the same offerings as Haven Hill Lodge.

OTHER ACCESSIBLE RESIDENT ENVIRONMENTAL SITES

Harrison-Crawford State Forest

This is an Indiana State Forest located in the counties of Harrison and Crawford. A new group camp with a capacity of 100 people has just been opened. It is equipped with heated cabins, a complete kitchen and dining room, and a recreation hall. There is a new nature center as well as miles of trails. (Phone 738-8232 for more information.)

4-H Camps

The 4-H Clubs have several camps in Kentucky. They are complete facilities varying in size, modernization and location. Contact the local 4-H extension agent at 583-6501.

T.V.A.--Land Between The Lakes Golden Pond, Ky. 42231

T.V.A. (Tennessee Valley Authority) owns and operates two residential sites--Camp Energy and Brandon Springs. Both are well equipped and have fine programs; however, travel time to these camps is four hours by bus. (For information call 502-924-5602.)

Mammoth Cave National Park

The national park has group camping areas available to school groups. Pavilions, fireplaces, and bathroom facilities are included. Tents or tarpaulin are necessary as this is strictly a camping area (no cabins). Camping at Mammoth Cave National Park offers the opportunity to see the beauty of the park as well as the cave. (Contact 758-1211 to ask about group camping and/or cave tours.) For further information write Mammoth Cave National Park, Mammoth Cave, Ky. 42259.

May Woods

May Woods is a complete outdoor facility with dorms and kitchen facilities. It is 30 miles outside of Richmond, Ky. For information write or call Eastern Kentucky University, Route 2, Crab Orchard, Ky. 40419, 606-925-2274.

CHOW TIME!

Food is a necessary part of any resident program. Quantity is very important, but quality should not be overlooked. The resident programs provide a unique opportunity to involve students in planning and eating a well balanced meal.

Depending on the facility, groups have three options with food:

1. Contract with Camp Piomingo to prepare, serve, and clean up after all meals. This costs about $6.50 per day and you are assured of getting good camp meals. It is recommended that first time campers use this option. (You may bring the first day's food and save costs.)

2. Utilize the camp's kitchen and equipment to cook the meals yourself, with parent and student help. This is usually less expensive and is a good learning experience for students, if it is well supervised by adults. Contact your local school lunchroom personnel for help and advice. Some lunchrooms provide bag lunches, milk, breakfast items, and one school sends pre-cooked stews and frozen homemade pizza which is heated at camp. It takes team planning with the lunchroom personnel to work out the details.

3. Cook out over an open fire on camp stoves. This gives you more freedom and a back-to-nature experience but requires a lot of time and energy. Cooking around the campfire is ideally suited to small groups. Refrigeration and dishwashing facilities are available, depending on the site.

If using the facilities at Piomingo, remember that several schools might be sharing the kitchen, and careful planning, scheduling, and labeling is important to ensure a non-conflicting schedule.

The Jefferson County Food Services cooperated in planning the menus for this handbook. Good nutrition at an economical cost is an essential part of a resident program. Only Grade-A type menus are included. Milk must be served with all meals in order to qualify for reimbursement. If the students are on a hike that requires a sack lunch, milk must be served when the hikers return to camp. A drink that does not require refrigeration may be used on a long hike. The school lunch program does not reimburse dinner menus, but Food Services personnel and the lunchroom manager will cooperate in ordering food supplies. The cooperation of the classroom teacher, the lunchroom manager, and food services can keep the cost at a minimum.

Basic Equipment

Read through your planned menus and prepare an equipment and basic supply list. Large cooking utensils may be borrowed from your school or church.

- 2 pancake turners
- 2 large knives
- 2 large spoons
- 1 mixing bowl
- 2 can openers
- 1 large iron skillet
- 2 large cooking pots
- Pot holders
- Heavy duty aluminum foil
- 2 large containers for prepared juices and drinks
- Bleach
- Paper towels
- Scouring pads
- Liquid detergent
- Paper bags
- Charcoal
- Matches (in waterproof container)

Basic Hints and Food Facts

Try to find recipes requiring the fewest number of steps to prepare. One-pot meals or meals that can be cooked individually in foil are easy and delicious. (See Recipes, pp. 15-18.) Keep in mind that you must provide meals with the minimum daily requirements.

Begin a cooking fire at least one hour before you need a bed of coals. Make the bed of coals at least 1-2 inches deep.

Soap the outside of all cooking pots with liquid detergent or a paste of soap powder and water. Carefully applied to the sides and bottom, it will ease clean-up. No one enjoys scouring pots!

Phone numbers for help in menu planning:

Division of School Food Service
State Department of Education
Martine Collier, Consultant, 587-9531--Extension 4390

Food Services
Jefferson County Board of Education

Suggested Daily Menus

Check with lunchroom manager and/or Jefferson County Public School Office of Food Services for the required amounts.

First Day	Second Day	Third Day	Fourth Day
	Breakfast	Breakfast	Breakfast
	Bacon Eggs Grape juice Milk	French toast Syrup Powdered sugar Orange juice Hot chocolate Sausage Butter	Cereal Orange juice Hot chocolate Brown bears
Lunch	Lunch	Lunch	Lunch
Hot dogs Baked beans Potato chips Applesauce Milk Marshmallows	Tuna fish sandwich Potato chips Milk Orange soda Cookies	Peanut butter and jelly or Bologna and cheese sandwiches Corn chips Apple Milk Candy bars	Campfire stew* Potato chips Celery with peanut butter Milk
Supper	Supper	Supper	
Bunyan burgers Corn Jello Mexican corn chips Milk	Sloppy Joes Pickles French fries Pear with cheese Chocolate pudding Milk	Barbecued chicken Baked potato Green beans Strawberry shortcake Milk	

Breakfast Menus

1. Orange juice--1/2 cup
   French toast with honey
   or syrup--1 slice
   Milk--1/2 pint

2. Hot applesauce--1/2 cup
   Fried luncheon meat--1 ounce
   Bread--1 slice
   Milk--1/2 pint

3. Banana--1 small
   Choice of ready-to-eat
   cereal--3/4 cup
   or 1 ounce
   Milk--1/2 pint

4. Juice--1/2 pint
   Oatmeal--3/4 cup
   Milk--1/2 pint
   Toast--1 slice

5. Sausage--1 ounce pattie
   Toast--1 slice
   Apple wedges--1/2 cup
   Milk--1/2 pint

6. Orange and grapefruit
   sections--1/2 cup
   Doughnut--1
   Milk--1/2 pint

7. Orange juice--1/2 cup
   Hard-boiled egg--1
   Whole wheat toast--1 slice
   Hot cocoa--1 cup

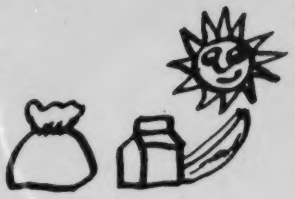
8. Orange quarters--1/2 cup
   Pancakes with syrup--1-2
   Milk--1/2 pint

9. Juice--1/2 cup
   Scrambled egg--1
   Hashbrown potatoes--1/2 cup
   Whole wheat toast--1 slice
   Milk--1/2 pint

* These breakfast menus meet USDA requirements.

One-half cup cooked rice can be added to any breakfast as a supplement.

Sack Lunch Menus



In order to be reimbursed for lunches, the following requirements must be met.

1. Milk must be served. (If you choose not to carry milk on a long hike, plan to serve it when you return to camp.)

2. At least 2 ounces of protein must be served.

   Examples:

   Slice of bologna = 1 ounce
   Slice of cheese = 1 ounce
   1/4 cup peanut butter = 2 ounces

Any combination of the following foods will provide a good lunch that can be carried on a hike.

Submarine sandwich
Bologna (no mayonnaise)
Cheese
Peanut butter/jelly
Lunch meat

Pickles
Carrot sticks
Celery sticks
Green pepper slices
Cheese sticks
Celery stuffed with peanut butter

Fruit

Peanuts
Potato chips

Supper Menus

Hot dog/bun
Corn
Diced pears
Milk

Chili, Crackers
Milk
Cheese sticks
Cookies
Celery and carrot sticks

Barbecued Chicken
Green beans
Baked Potato
Peaches
Milk

Sloppy Joes**
Pickles
French fries
Pears with grated cheese
Chocolate pudding
Milk

Hamburger/bun
Corn
Applesauce
Pickles
Milk

Campfire Stew**
Cheese sticks
Fruit
Milk

Surprise Package**
Applesauce
Tossed salad
Milk

Ham in Foil**
Green beans
Waldorf salad
Milk

Southern goulash**
Tossed salad
Jello with fruit
Milk

*Milk is the only reimbursable item.

**Recipes appear on following pages.

Recipes...

Cook over open fire~ tastes good!

Campfire Stew (serves 24)

6 lbs. ground beef
2 large onions
2 Tbsp. fat
10 cans vegetable soup
Salt

Fry onions in fat until brown. Remove onions. Brown meat. Add onions, undiluted vegetable soup, and 1 can water. Cover and cook slowly over good coals for 20 minutes. Serve over split hamburger buns, plain, or with crackers.

Wrap Meat and Vegetables in foil~Cook on coals!

Surprise Package

Place hamburger, sliced carrot, sliced potato, and a slice of onion in heavy foil. Seal edges. Cook on coals about 30 minutes.

Ham in Foil

Place ham slice, sweet potatoes, and crushed pineapple in heavy foil. Seal edges. Cook on coals about 30 minutes.

Spaghetti or pasta helps stretch meals!

Southern Goulash

2 lbs. ground beef
2 onions, chopped fine
2 c. beef broth
2 tsp. salt
2 1/2 c. uncooked spaghetti
2 c. hot water
2 tsp. Worchestershire sauce

Brown meat and onions. Add remaining ingredients. Cover and cook on low heat 15 minutes and simmer 20 minutes.

Sloppy Joes (serves 24)

6 lbs. ground beef
2 c. chopped onions
4 Tbsp. sugar
4 bottles chili sauce

Brown meat and onions. Combine remaining ingredients and simmer at least 15 minutes.

Pocket Stew

6 lb. ground beef
1 carrot per person
Salt and pepper
1 small potato per person
1/2 onion per person

Make patties of meat and place in center of square of heavy foil. Top with thinly sliced potato, carrot, and onion. Season. Wrap foil, making sure all seams are doubled so the pocket will not leak. Put pocket in coals and cook twenty to thirty minutes, turning often.

Bunyan Burgers

6 lbs. hamburger
1 lb. cheese
1 large dill pickle
2 onions chopped
Salt and pepper
2 tbsp. mustard
2 tbsp. mayonnaise
3 tbsp. catsup
1 tbsp. Worchestershire sauce

Make 48 hamburger patties. Mix all other ingredients together. Put a spoonful of the mixture in the center of 24 patties. Place remaining patties on top and crimp edges. Be sure they are sealed. Place each pattie in center of heavy-duty foil and roll edges. Cook on coals. The cheese will melt and form a sauce inside hamburger. Serve on buns.

Chicken in Hiding

24 pieces of chicken
or 1 piece per student
Thick slices of carrots
Thick slices potatoes
Celery seed
Salt and pepper
2 tbsp. water per package

Place one piece of chicken in center of heavy foil. Add seasonings. Place carrot and potato slices on chicken. Double fold the edges and place packages in coals. Allow about 45 minutes for cooking. Turn packages often.

Walking Salad

Core, but do not peel, one apple for each person. Fill the cavity with a mixture of cream cheese and raisins. Peanut butter thinned with milk and mixed with raisins may also be used.

Pudding Cones

4 packages instant pudding mix 24 ice-cream cones
1/2 gallon milk

Put pudding and milk into a large jar, shake, and let stand to set. Pour into cones.

Pudding Cones

Cocktail Cones

4 cans fruit cocktail (No. 2-1/2)
4 bananas
1 bag miniature marshmallows
24 ice-cream cones (cup cones)

Drain juice from fruit cocktail; add sliced bananas and marshmallows. Spoon into ice-cream cones.

Cocktail Cones

Brown Bears

24 uncut wiener buns Cinnamon and sugar mixture
2 lbs. margarine, melted

Dip buns in melted oleo and roll in cinnamon-sugar mixture. Put buns on green stick and toast over hot coals until crispy.

Brown Bears

S'Mores

1 marshmallow per s'more 1/2 chocolate bar per person
2 graham crackers per person

Toast marshmallow over coals. Put chocolate and marshmallow between graham crackers.
Variations:

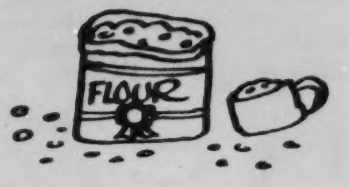
Robinson Crusoes--Use peanut butter instead of chocolate.

Apple S'Mores--Use apple slices instead of grahams.

Brown Bunnies--Use chocolate covered grahams instead of plain ones. Eliminate chocolate squares.

Snow on the Mountain--Sprinkle with shredded coconut and leave off the top graham cracker.

S'MORES



Recipes~Continued~

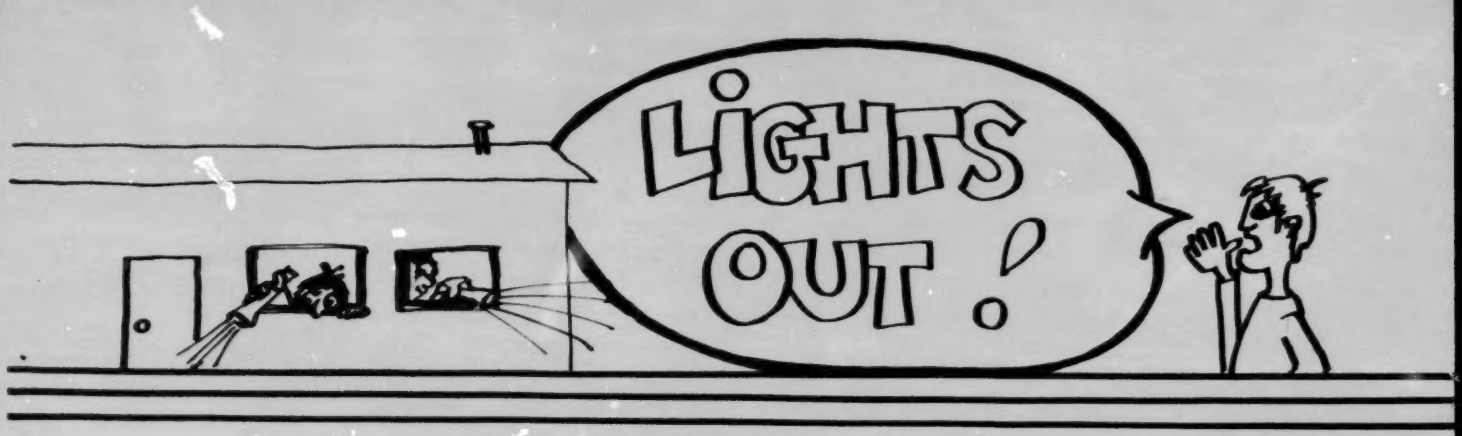
Baked Potato in Foil

Wash and trim potato, and place on doubled heavy foil. Make several holes in potato. Sprinkle water on potato and foil. Wrap and put on hot coals. Turn often. Cook 20 to 30 minutes according to size.

Roasting Ears

1 ear of corn per person
Margarine
Salt and pepper

Pull shucks to bottom of ear, being careful to leave shucks attached. Clean and wash ear of corn. Add butter, salt, and pepper, and replace shucks. Wrap in foil and roast directly over hot coals for 20 minutes, turning ear one quarter turn every 5 minutes.



For some students the environmental education trip is their first time away from home. Many students are fearful of the outdoors and the dark. Homesickness and bad dreams can best be avoided by having quiet and/or happy evening activities. A campfire and snack are popular with most students. Evening activities such as a moonlight hike, night walk, square dance, sing-a-long, scavenger hunt for sounds, and cabin skits create pleasant memories and a gradual slow-down from a busy day.

The first night at camp is usually very exciting. Settling down to a new, sometimes primitive, environment can be difficult for both teacher and student. Teacher or parent helper should assure the sleep and security of the students.

If you are using Otter Creek facilities, the students will sleep in cabins suitable for 4-6 people, and if the students have shared in the cabin selection, they can help each other have a good night's sleep.

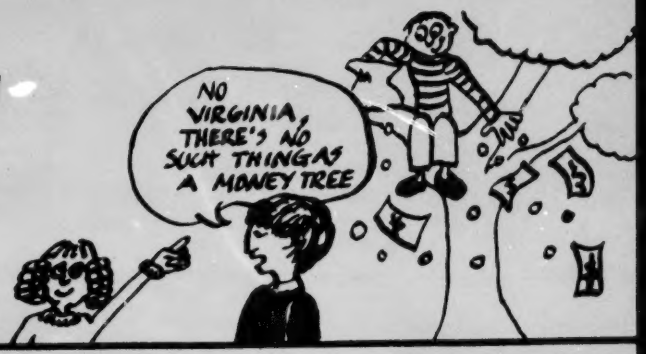
Techers should see that the students' privacy and right to say prayers are respected. The students should be free to pray openly or in bed.

Teachers should be aware that they may have a bed wetter and should be prepared to handle the situation without embarrassing the student.

If the facilities of the camp site include public showers, the teacher may wish to discuss shower accommodations before going to camp. The students should talk freely, but not be allowed to ridicule others.

Early risers can be encouraged to remain quietly in their beds in consideration of cabin mates who are still sleeping. Sometimes a teacher or an adult leader who is also an "early bird" can lead a morning hike to hear and see animals who are up and around. Small, quiet groups often spot deer in the early morning.

WHAT ABOUT THE MONEY?



Camp Costs

Camp costs in 1982 ranged from $4.00 to $6.00 per day depending on the arrangements for food. The approximate costs for one student for a typical three-day program are listed below:

Lodging $3.00 per night	$ 6.00
* Food	10.00
Insurance	.60
Transportation	2.40
Instructional Supplies	1.00
Total	$20.00

* Food cost based on students providing bag lunch; school providing hot dogs for first dinner; then camp providing the next four meals.

Suggestions for Fund-Raising Projects

(See Jefferson County Public Schools Policy: IGDF regarding student fund raising on the following page.)

Aluminum Can and/or Paper Drive

If the project is conducted over a period of months, substantial money could be raised and the project can be correlated with math, science, business, and other subjects.

Candy Sale

This fund-raiser has been used successfully by several schools. Candy is bought on consignment and distributed to students to sell.

Car Wash

A car wash may be held after school or on Saturdays.

T-Shirt Sales

T-shirts with a camp logo can be bought for $3.25 per shirt and sold for $5.00. This project requires an initial investment.

Bake Sale--Before or After School

It is necessary to get permission from the principal to conduct a bake sale on school premises.

JCPS POLICY: IGDF

STUDENT FUND-RAISING ACTIVITIES

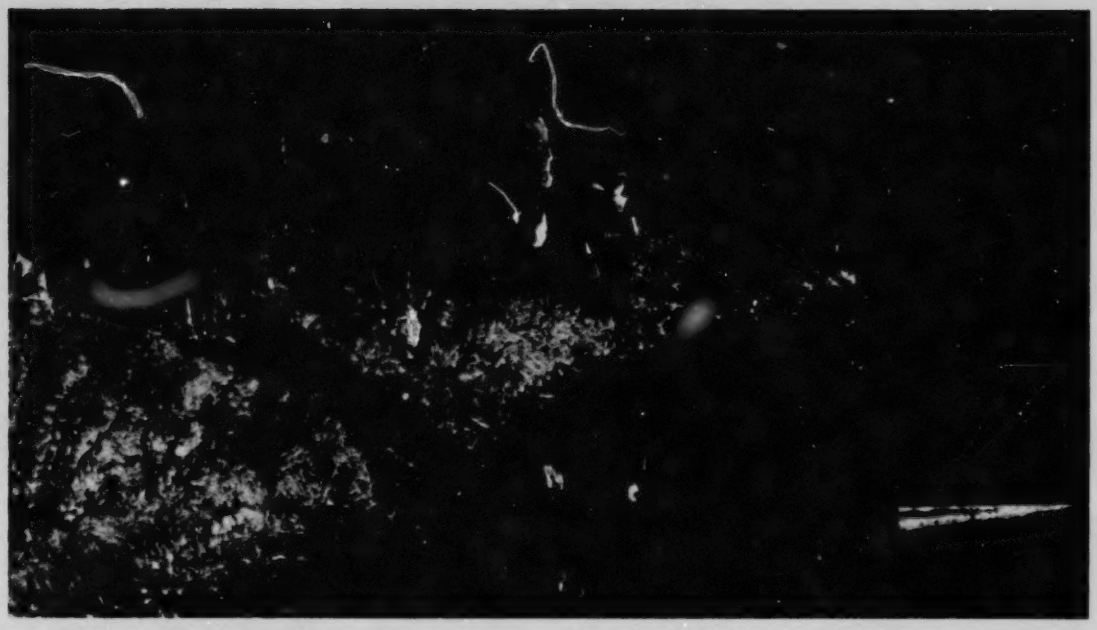
All schools may promote or engage in one school-wide fund raising project during a school year. Additional school-wide fund raising projects shall require approval of the Board.

This policy does not prohibit the employment or use of students for selling of athletic or other school sponsored activity tickets, as well as other items at school events.

No student shall be compelled to participate, solicit, or meet any kind of quota in any school-wide fund raising activity.

Any fund raising activities conducted after school hours by an organization ostensibly serving the Jefferson County Public Schools need not be approved by the Board. Students are permitted to take home flyers, announcements, and information concerning fund raising activities by organizations that ostensibly serve the Jefferson County Public Schools.

Adopted: October 1, 1979, Motion #12934



"I do not understand
Infinite wisdom of this
workable plan
That everything is oneness
with the land."

Jesse Stuart

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BEFORE AND AFTER YOU GO...

To ensure the maximum impact of the residential environmental education program it is necessary to blend it into the year's curriculum. Establishing the proper progression for each class depends on the teachers' and the students' experience. This section will outline activities for in-class, around-the-school, and day-long field trips.

In setting up activities for the in-class environmental experience, select from the ones in this guide including the bibliography. Organizing an environmental center in the classroom helps establish an environmental awareness which can carry over in the students' daily activities. See the center described on the next page as an example. It is important to involve students in creating and maintaining the environmental center.

THE RESIDENT EXPERIENCE...

Involving the students in planning the residential experience, sets the stage for activities in all the curriculum areas. The budgeting and the fund raising should be built into mathematics units. Map reading is essential at camp as is first aid. If students have several lessons in formation of caves, history of local caves, and cave life, the actual cave experience will be more meaningful.

Outdoor Classroom - Using Your Own Schoolyard As a Classroom

It is only natural to explore and utilize the schoolyard as the next step in the environmental study progression. Taking students outside for one period allows the students as well as the teacher to gain experience in outdoor learning situations. This experience is invaluable at camp--in planning activities and in being comfortable and confident.

If there is sufficient interest at your school, a school-based environmental center can be established. It is important to have the support and involvement of other teachers, the administration, the students and the community. Involving a number of key people will contribute to the success and longevity of the center. Before starting your outdoor classroom, it is recommended that the initators visit Blackacre Nature Preserve, the demonstration environmental education center sponsored by the Jefferson County Board of Education. (See the description at the end of this chapter.)

An outdoor classroom at the local school site provides a readily accessible area for students. The site requires no special permits, transportation logistics, lunch planning, or class schedule shifting. It is also immediately available for continuous studies, unexpected observations, and supervised individual study projects.

Each outdoor classroom is an individual project and can be planned according to the size and shape of the school site, topography, and geographic location. The urban school setting, therefore, is as unique as the school site located in the suburbs.

In Class Activities

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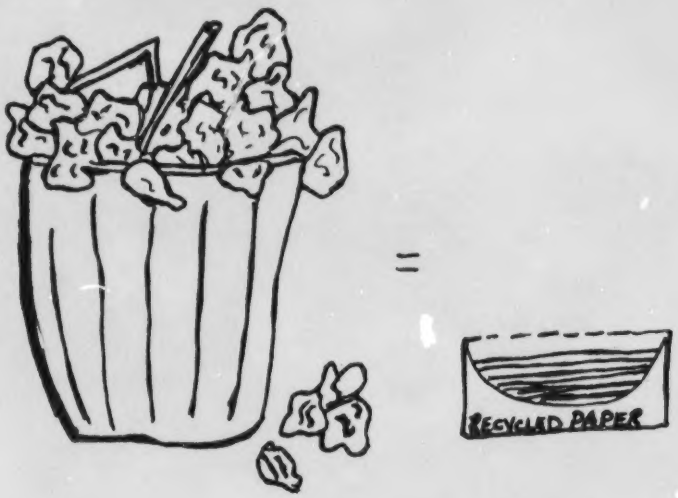
Guidelines For A Recycled Paper
Program At Your Center

Establish a recycled paper section in your center which encourages students not to throw away paper used only on one side. Use the paper for notes, artwork, etc. Remember that you as a teacher are an important example in this type of activity!



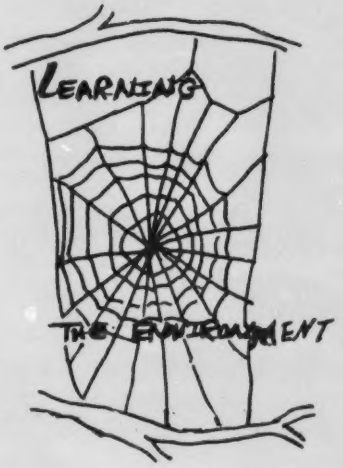
*Write to: American Paper Institute, Inc.
260 Madison Avenue
New York, N.Y. 10016
(212) 883-8000

Ask for their free pamphlet: How You Can Make Paper.

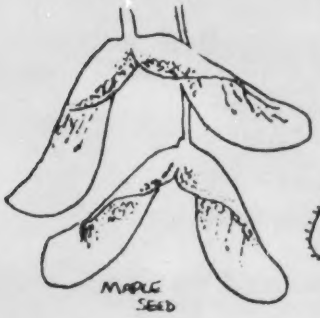
*Refer to: "Mrs. Newspaper Story" in Energy Conservation Activities For The Classroom K-12.

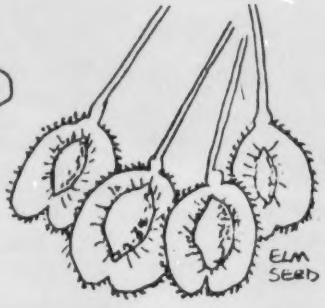
Environmental and Energy Learning
Center

Possible Learning Outcomes:



1. Identifying the components of the environment and ecological cycles.
2. Learning facts concerning the needs and care of plants and animals.
3. Becoming familiar with books, organizations, and magazines on wildlife, energy, and environmental crisis.
4. Drawing conclusions about ways to benefit and improve environmental conditions.
5. Writing original poems, stories, and plays related to society's need for environmental improvements.
6. Matching flora and fauna with their particular habitats.
7. Naming at least four new ways to conserve energy at home and practicing at least four new ways to conserve energy at home.
8. Recognizing new words about the environment and energy.
9. Creating positive attitudes toward self and respect for one's surroundings.
10. Naming four endangered animals and/or plants found in Kentucky.
11. Listing three ways to invite wildlife to visit school grounds or backyard at home.





12. Practicing at least three new ways to encourage wildlife on school grounds or backyard.

13. Becoming familiar with ways in which one is part of the ecology cycle.

14. Becoming familiar with ways to recycle man-made products, and practicing one way to recycle a man-made product.

Possible Activities at the Learning Center

1. Compose stories, poems, and artwork about the environment for a classroom ecology notebook.

2. Make a collection from magazine cut-outs of various animals to classify, identify, or use as inspiration for creative writing or artwork.

3. Establish a shelf of items collected on nature walks for students to identify and explore. Change items from month to month or season to season. Hold a class discussion on how these items fit into the ecology cycle.

4. Establish a bird feeding station outside your classroom window to observe behavior, feeding habits, appreciation, identification and importance of birds in the ecology cycle. (See guidelines for feeding birds.)

5. Participate in a paper recycling program in class. (See guidelines for recycling paper.)

6. Contribute cans to the can recycling program in class. (See guidelines for recycling cans.)

7. Identify plants collected on nature walks. (Do not pick endangered plants, and pick only plants which are common.)

8. Work puzzles on environmental topics.

9. Construct a terrarium to illustrate various cycles. (See guidelines for construction of a terrarium.)

10. Read current newspaper articles on environmental topics for class discussion.

Possible Activities at the Learning Center
(continued)

11. Grow plants from household vegetables such as carrots, beets, avocado seeds, pineapple tops and sweet potatoes.

SWEET POTATO VINE
CARROTS AND BEETS
REMOVE LEAVES AND TRIM 1" OF STEM AND 1" OF VEGETABLE. PLANT VEGETABLE END IN SOIL. WATER AND KEEP SOIL MOIST.
AVOCADO
REMOVE SEED FROM PLANT. STICK 3 TOOTH PICKS AROUND CENTER OF SEED. ROOT IN WATER THEN PLANT IN SOIL.

12. Look at books, magazines, and filmstrips on environmental issues.

13. Construct display charts on ways to conserve energy.

14. Construct display charts on endangered animals, ecology cycle, types of energy.

15. Do activities listed on the environmental/energy task cards.

16. Plant and care for seeds collected on nature walks.

17. Read and complete activities in the environmental learning package.

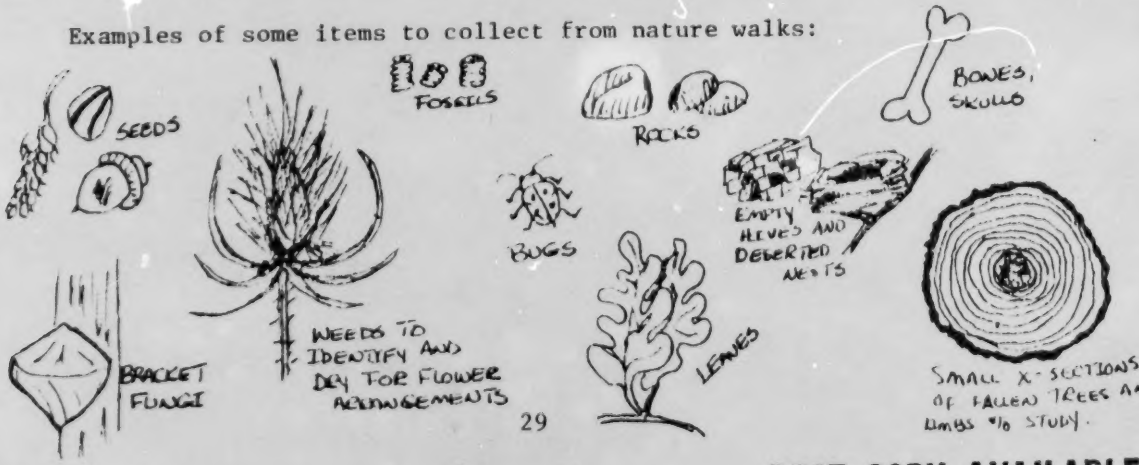
18. Write conservation organizations for information on their purpose and accomplishments in the environmental field. (See list of conservation organizations.)

19. Record and chart information on seed and plant requirements for growth.

20. Plan to develop a classroom garden plot on school grounds. Start seeds in window gardens. Contact your local county extension agent and local 4-H Club for information and help.

21. Classify and collect rocks taken from field trips and nature walks.

Examples of some items to collect from nature walks:



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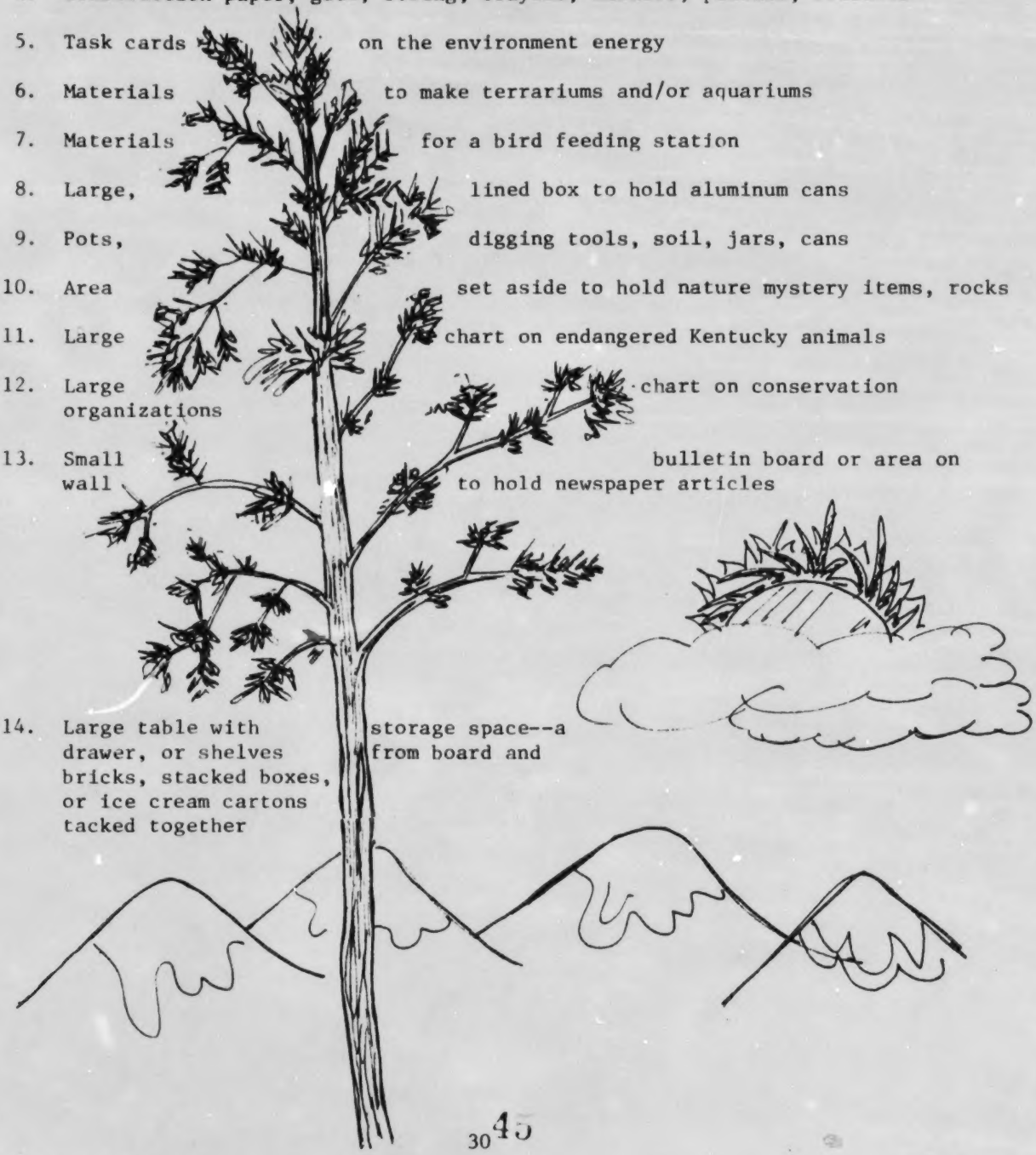
A List of Possible Resources and Equipment
for the Learning Center:

1. Magazines, newspapers, library books, periodicals, library filmstrips and projector
2. Posters (student or commercial) on ways to conserve energy
3. Collection of various puzzles and games on the environment and/or energy
4. Construction paper, glue, string, crayons, markers, pencils, scissors
5. Task cards on the environment energy
6. Materials to make terrariums and/or aquariums
7. Materials for a bird feeding station
8. Large, lined box to hold aluminum cans
9. Pots, digging tools, soil, jars, cans
10. Area set aside to hold nature mystery items, rocks
11. Large chart on endangered Kentucky animals
12. Large chart on conservation organizations
13. Small bulletin board or area on wall to hold newspaper articles
14. Large table with storage space--a drawer, or shelves from board and bricks, stacked boxes, or ice cream cartons tacked together



Blackacre Nature Preserve

Blackacre is an environmental education center sponsored by the Jefferson County Board of Education through agreements with Judge Macauley Smith and the Kentucky Nature Preserves Commission. Blackacre has 170 acres of farmland and woods as well as the oldest homestead in Jefferson County. The homestead is comprised of a stone cottage built circa 1790, a manor house built circa 1840, a double crib log barn, a spring house, and several outbuildings.

At Blackacre, The Susan L. Schick Nature Center, a 30' x 30' passive solar-heated classroom is available to use as a base for the learning experience. All the equipment necessary for exploring the surrounding area is available at the center. Adjacent to the center is a Clevus Multrum composting toilet. It is a self-contained unit from which wastes are recycled for garden compost.

On the land are a number of sites of educational significance. These include not only the ponds, stream, and wooded groves of hickory, maple, and oak but unique study areas offered by two small caves, giant ant-hills, sinkholes, and the diversity of wildflowers and edible wild plants.

A series of self-guided trails and eight activity centers are in the planning stage. Every feature is being designed so that the sight-impaired and the mobility-impaired student can utilize it. All plans are available to any school to use in planning a school based outdoor classroom.

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THE THREE R'S AT BLACKACRE

RESEARCHING

REFLECTING

RECORDING

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SCHEDULING THE DAY!

Organizing activities is essential for a smooth, successful camp. Individual schedules will vary depending on the number of students, number of resource persons, and the talents of those you have working with you. In the next few chapters you will find numerous ideas and activities that can be worked into this schedule. It is very important to delegate responsibility in such a way that each adult knows what is expected. It is also important to ensure that each adult has time to him/herself.

Divide your campers into groups of 8-15, each having an adult leader who would move with the group from activity to activity. The leader should be familiar with the students and the overall schedule and should remain with the groups during the planned program, even though the activity is run by a resource person. The following schedules will give you a starting point for planning your program.

WEDNESDAY--CAMP FOR ABOUT 60 WITH GROUPS OF 15 STUDENTS PER GROUP

9:00 - 9:30 a.m.	Pack-up and get ready to go.
9:30 a.m.	Leave
10:30 a.m.	Arrive at camp
10:30 - 11:15 a.m.	Orientation:

Agenda -
- Locate bathrooms.
- Make cabin assignments.
- Discuss:
  - lost and found
  - clean-up
  - rules
  - what to do in case you get lost (sit still or follow familiar landmarks)
  - take nothing but a photo and leave nothing but a footprint
  - activity groups
  - assignments
  - introductions.

11:30 - 12:15 a.m.	Lunch
12:30 - 3:00 p.m.	Walk to Visitor's Center, Otter Creek Park, nature center presentation and hike. Walk back.
3:30 - 5:00 p.m.	Afternoon groups Group A--Art, Project ID; Group B--Nature Study, teacher Group C--Cave, Project ID; Group D--First aid, 4-H helper
5:15 - 6:00 p.m.	Supper
6:15 - 7:30 p.m.	Scavenger hunt (total group)
7:30 - 8:30 p.m.	April Skies, presented by University of Louisville, Rausch Planetarium.
8:30 - 9:30 p.m.	Campfire, songs and skits
10:00 p.m.	Lights out!

THURSDAY

8:00 - 8:45 a.m.	Breakfast	
9:00 - 10:30 a.m.	Morning groups	
	Group A--Nature study	Group B--Cave
	Group C--First aid	Group D--Art
10:45 - 12:15 a.m.	Morning groups	
	Group A--Cave	Group B--First aid
	Group C--Art	Group D--Nature study
12:20 - 1:00 p.m.	Lunch	
1:15 - 2:45 p.m.	Afternoon Groups	
	Group A--First Aid	Group B--Art
	Group C--Nature study	Group D--Cave
3:00 - 4:30 p.m.	Recreation, new games, dance	
4:30 - 5:30 p.m.	Free time--Write in journals.	
5:30 - 6:30 p.m.	Supper	
6:30 - 8:30 p.m.	Night hike--tocal group	
8:30 - 9:30 p.m.	Campfire	
10:00 p.m.	Lights out!	

FRIDAY

8:00 - 8:45 a.m.	Breakfast
9:00 - 10:30 a.m.	Groups A and B--Rafting, Project ID Groups C and D--Indian softwalk, Otter Creek Staff
10:30 - 12:00 a.m.	Groups A and B--Indian softwalk, Otter Creek Staff Groups C and D--Rafting, Project ID
12:00 - 12:30 p.m.	Lunch
12:45 - 1:30 p.m.	Clean-up and leave!

ACTIVITY SCHEDULE

First Day	Second Day	Third Day
Arrive Set up camp Collect green sticks Collect firewood	Projects 1. Leaf prints 2. Cemetery rubbings 3. Collecting 4. Find a "thing" 5. Campfire Scramble 6. ABC Scavenger Hunt	Hike to river Look for a fossil bed
Lunch	Lunch	Lunch
Visit Nature Center Hike Mudslide (showers)	Cave Rock Slide (showers) Complete projects	Treasure Hunt Web of Life Pack for home
Dinner	Dinner	Dinner
Hike to Lover's Leap Sense Sacks Blaze a trail	Campfire Race "Critter Race" Star gazing	Go Home Hooray!!

5.

ONLY YOUR
DREAM HAS VALUE
AND
CAN LAST.

-- Jesse Stuart

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FOR ACTIVITIES!

- TAKING A CLOSER LOOK ON A HIKE
- ACTIVITIES FOR BASE CAMP
- HIGH ADVENTURE ACTIVITIES
- RAINY DAYS

TAKING A CLOSER
LOOK ON A HIKE

A QUIET WALK

Purpose: To use the different senses to explore the various dimentions of the environment.

Materials: Blindfolds, clipboards and cellophane

Time/size: 20 minutes; any size group

Procedure:

1. Let students stop at various places and wash their hands in the soil, leaves, water, moss, rotting wood--anything and everything.

2. Let students have slide holders to "imagine" pictures they would take if they could.

3. Stop at a spot and have everyone lie down like the spokes of a wheel. Each person closes his/her eyes and listens to the "symphony" of natural sounds. Share thoughts after about 5 minutes.

4. As you are walking, pick up something unusual and pass it back along the line. Tell each student to make friends with it.

5. Stop at an appropriate spot and tell students to hug a tree; walk backwards; close eyes and feel a tree's bark.

6. Using cellophane of various colors, stop and let everyone explore the area with colored glasses.

7. Have each student take a clipboard with a blank piece of duplicating paper. Ask them to draw a picture using only natural things to make color.

8. Divide the group into pairs. One person of each pair is blindfolded, the other leads the blindfolded person around and places his/her hands and body on, in, over, under, and around different natural objects in the area. (Remember to avoid poison ivy and oak.)

9. End with a sharing circle in which each person has an opportunity to express feelings about the walk.

ANIMAL HABITAT

Purpose: To locate places where animals might have spent the night.

Material: None

Time/group: 1-2 hours; 12-15 students

Procedure: Take a hike and look for tracks, trails, homes of animals.

Homes in the Ground. When observing holes in the ground ask: (1) What is the diameter? (Emphasize that it is important to know the diameter in order to predict what type of mammal might use the hole.) (2) Does the hole have two or more entrances? (3) What other signs of animal life do you find near the hole? (Explain that this is extremely important in order to get a more definite identification of the mammal which is using this burrow.) (4) Does there appear to be any evidence of activity?

Homes Above the Ground. Look for animal homes in brush piles, rock crevices, homes high above the ground or in trees. Ask the following questions about the located homes: (1) Is the home in a hollow tree, exposed high in a tree, in bushes or plants near the ground? (2) Is it near the water such as a pond or stream? (3) What does it seem to be made of? (4) Are there any other signs of animal habitation near the home?

Food Storage. Ask the following questions about the storage of an animal's food: (1) Where is the food store found? (Explore such things as a hollow tree, burial in the ground.) (2) What is in the food store? (Look for nut hills, twigs, possibly stored or buried food.) (3) Are there any other signs of animal life near the food store? (tracks, droppings)

Trails and Runways. Ask students to find a trail or runway. Ask these questions: (1) Does it seem to be well used? (2) Describe the surroundings. Can you tell where it is going? Does it appear to be going toward a water hole or toward an open field for feeding? (3) Are there any signs that indicate what mammal might be using the trail or runway?

Toothmarks. Ask the students where they would find toothmarks of animals? (tree trunks, nut hulls, branches) If any are found, ask the following questions: (1) Was the animal large or small? How do you know? (2) Are the toothmarks a result of eating or some other activity? (3) How might the height from the ground indicate the kind or size of the animal.

Tracks. Find animal tracks by looking in soft sand or dirt. These can be more easily found near a water source. While observing ask the following questions about the tracks: (1) Does there seem to be only one animal of the kind in the area? (2) Are all tracks of the same animal or are there other kinds? (3) In what direction are they going? (4) What can you tell about the size of the animal? (5) What reason can you predict for its presence here?

ACTIVITIES FOR BASE CAMP

SENSORY CIRCLE

Purpose: To use the senses to investigate the environment.

Materials: None

Time/Group: 1 hour; 20 students

Procedure:

1. Sit with the students on the ground in a circle.

   Ask students to name the senses. After they have named the five senses, say: "That's five. Now can anyone name the sixth sense? It could be ESP. But suppose we say that the sixth sense can make any place enchanting, even your own backyard. Yes, the imagination is the sixth sense. Now let's do some activities using each of our senses."

2. Have everyone take a deep breath through the mouth. Ask: How does the air taste? Now take a breath with your nose. How does the air smell? Put your nose to the ground. How does the ground smell?

3. Instruct students to make a frame by placing thumbs together palms out.

   Give these directions: Frame something off in a distance. Imagine that you are taking a picture post card to send a friend. What makes that picture pretty: Is it the colors, the shapes or both? Maybe it's even the spaces around the shapes---the negative space. If you look closely you will see that even the negative spaces have shapes.

4. Give directions: Now make a zoom lens with your fist and through it look at something close up and tiny. Take its picture. Did you ever see an earthworm smile? (Looking for negative spaces is especially effective in winter or late fall when trees have lost their leaves.)

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5. You might make eye masks with colored cellophane and allow students to view the colors through "rose-colored glasses."

   Discuss colors, using these questions: What about colors? How do they effect our moods? How do you feel when the sky is bright blue? How do you feel when the sky is cloudy and gray? How would you feel if you looked out your window and the sky was green and the grass was blue? Would you feel upside down? How would you feel if the grass and flowers and trees were bright yellow and the sky psychedelic purple. The colors we have surrounding us, the greens, the browns, and blues are very comfortable and pleasing to the eyes. They allow us to rest, even when we are awake.

6. With palms extended, have everyone move hands lightly across the ground.

   Ask: How does it feel? Now bring your hands together for a few minutes and clap really hard and fast. Now move your hands lightly across the grass. Notice how they tingle. You have just awakened those "sleeping" sensory cells on your hands. Your entire body surface, except for your hair, teeth, and nails, contains sensory cell--without them we could not enjoy the barefoot walks in the spring or a cool summer breeze. If we put our hands on a hot stove, we would not know that the flesh was being burned until we smelled the meat cooking!

7. Have everyone sit comfortably. Ask students to close their eyes, and open their ears. Sit quietly for six minutes or longer.

   Ask: What did you hear? Have students name one sound at a time. Was it music or was it noise . . .? Most natural sounds, the wind in the trees, the birds, and the crickets sound like music to us. How do you suppose our airplanes, cars, and factory whistles sound to the animals? Perhaps we do sound like noise to the animals. Maybe that is why they run and hide when we take hikes in the woods.

CHECKING IT OUT

Purposes: To observe a specific area
To keep a record on a continuing basis

Materials: Hand lens (1 per two students)
Paper, pencil
String (in 4-yd. lengths)

Time/Size: 30 minute minimum; any size group

Procedure: Give the following directions during the activity:

1. Work in groups of twos. Find a suitable spot and measure an area of about one square yard. (Look for good spots near the cabin. Do not go too far away without a counselor.)

2. Mark off the area with string and twigs.

3. On paper, describe your square yard.

   a. Is it a shady place?
   b. Is it muddy?
   c. What kind of soil is it? (sand, clay)

4. What time of the day are you studying it?

5. What kinds of vegetation are there? What fungi are there?

   a. Sketch some of the plants.
   b. Bring back samples to study under the microscope.

6. Use a hand lens to observe the area.

7. Sit quietly and watch your area for 15 minutes.

   a. Do any insects come in your area?
   b. If so, what kind? How many?

8. Go back, and observe the area the next day at the same time. What changes have taken place?

Note: Be sure your area is not anyone's path. If it is, you will find footprints in your square.

Variations:

In your spot, lie on your stomach, resting your chin on your hands, and look at the ground very closely. Imagine you are looking into a miniature world. Try to see things as a small insect might.

In your spot, lie on your back, looking up into the trees and out into the sky. What do you think it would be like to be a mole coming up from its hole in the ground and seeing the world for the first time?

Sit down in your spot. Put on a blindfold. Sit quietly and listen. How many different sounds can you hear? Who or what do you think made those sounds?

In your spot, lie down on your side, your head propped up by your arm, and think of a log or stump you may see lying around. What happens to a tree when it dies? Where does it go? How about a squirrel? How about you?

In your spot, lean your back against a large tree, close your eyes, then feel yourself melt into the bark . . . feel what the tree feels. What do you think it would be like to be a tree?

In your spot, find a rock, maybe a big one. Look at it, feel it. Did you ever wonder where it came from? It must last a long time. Did you ever think of living as long as a rock?

In your spot, sit down and run your hand over the ground around you, occasionally digging your fingers into the earth. What does it feel like? A carpet? Wipe your fingers off, then place a fingertip on the tip of your tongue. What does it taste like? Sweet? Sour? Tart? What if you couldn't taste?

In your spot, lie down on your stomach and pretend you are from Mars, coming to explore what is here. Dig into the soil, under the leaves, using two fingers. How many living things did you find?

LEAF IDENTIFICATION

Purpose: To identify tree leaves

Materials:
Charcoal (soft black)
Tissue
Construction paper
Spray glue
Books for tree identification

Time/Group: 30 minutes; any size

Procedure:

1. To begin this activity, ask students the following questions. How can you identify trees? (bark, leaves, smell, size, shape) How are trees different from shrubs and vines?

2. Choose a wooded area with a variety of trees. Direct the students to collect examples of eight different leaves.

3. Using tree identification resources (charts, tables, books, pictures), let the students identify their collected leaves. In a group, each student should share an identified leaf and tell how he/she made the identification. Do others agree? Disagree?

4. Instead of identifying the leaves by name, use the leaf type study sheet in the work sheets.

5. Ask each student to choose one leaf to do a chalk relief on tissue. Place a leaf on construction paper with veins up. Place the tissue paper on top of leaf. While holding leaf firmly in place with one hand, use the other to make firm, even strokes with charcoal over the leaf. (Do not scrub.) Repeat leaf print as desired. Spray glue on construction paper and center tissue print.

   Students should identify the leaf on their print and display the completed print.

ROCK FRIEND

Purpose: To become "personally" acquainted with an object found. To express feelings about an inanimate object.

Materials: A rock found by each student

Time/Group: 20-30 minutes; entire class

Procedure:

1. Ask each student to find a very special rock (preferably soon after arrival at camp). Tell him/her to give this rock a name and personality.

2. The group sits in a circle, and each student shares own rock friend. After each one has had a turn, the leader gathers all the rocks. Students close their eyes and put their hands behind backs. The leader passes the rocks around the circle behind students' backs. When a student finds own rock friend he/she backs out of the circle.

Variations: Find a stick, leaf, or animal friend.

NATURE NUMBERS

Purpose: To have students find math relationships in nature

Materials: None

Time/Size: 30 minutes; 10

Procedure: Send the students out to find something in nature which comes in groups of:

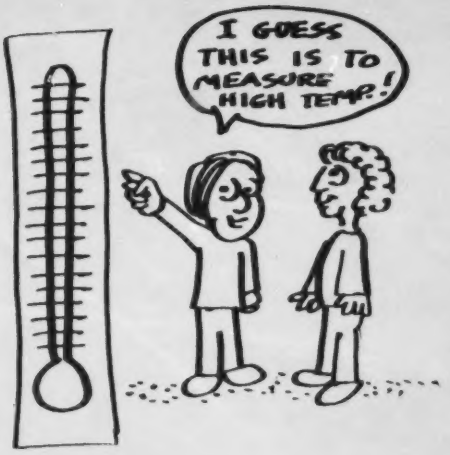
		Examples:
a.	one	a walnut
b.	two	wings on a maple seed
c.	three	trillium leaves
d.	four	four leaf clover
e.	hundreds	milkweed seeds

Variations: Have students find a million of something, and PROVE IT.

Have students find things that are opposites such as big leaf - small leaf, cold blooded - warm blooded.

Have students find things in progressions such as: size of leaves from small to large, seed to tree, color spectrum, shades of certain colors.

TEMPERATURE



Purpose: To find and record various temperatures

Materials: Thermometers, preferably one per two students

Time/Group: 30 minutes; 10-15 students

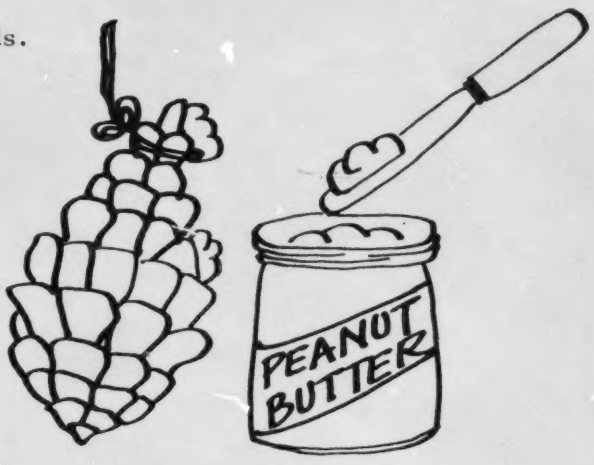
Procedure:

1. Pass out the thermometers to each group of students.
2. Make a chart as shown below.

SITE	TEMPERATURE	REASONS FOR VARIATIONS

3. Have the students find and record the following temperatures found in a designated area or in the entire camp.
   1. The hottest spot
   2. The coldest spot
   3. Stream water
   4. Cave and stream in cave
   5. Pond or some type of standing water such as a mud puddle
   6. 1 inch deep in the earth
   7. 6 inches deep in the earth
   8. In the shade
   9. In a sunny area
4. Discuss the findings with the class. Explain how the earth retains heat; the effect of the sun on water, earth, and air; constant temperature found in caves due to the slow rate of heat dispersal; the way water, earth, and air transfer heat; and how decomposition in earth is affected by the soil depth.

PEANUT BUTTER BIRD FEEDER



Purpose: To provide food for the birds.

Materials:
Large open pine cones
Peanut butter
Bird Seed
Oil
Wax paper

Time/Group: 30 minutes; 12 students or more

Procedure:

1. Have each student gather own pine cone. Tie yarn or twine on the small end of the pine cones.
2. Prepare a mixture of peanut butter, cooking oil, and bird seed, stirring until it becomes creamy.
3. Cover the table or work area with wax paper or newspaper.
4. Have the students stuff the peanut butter mixture into the openings of the pine cones. Then, have them roll the cone in peanut butter.
5. Hang this feeder on a tree branch for the birds. Return to this place later to look at birds.

NATURE'S CAMOUFLAGE

Purpose: To show how color helps a plant or an animal adapt to its environment.

Materials: 200-300 wooden toothpicks of different colors--yellow, green, brown, blue, red

Time/Group: 30 minutes; any number

Procedure:

1. Select an area with as much variety in ground cover as possible--leaves, grass, bare spots. Scatter the toothpicks. Instruct students to take 60 seconds to find as many toothpicks as they can.

2. Ask each student to divide his/her toothpicks according to color, and discuss why he/she found more toothpicks of one color than of others. (Generally, toothpicks with a color similar to the ground cover will be found last.) Relate this to the protective coloration of animals which helps to camouflage them from predators.

3. Discuss how people use protective coloration.

4. Discuss the importance of bright colors in distracting a predator (brightly colored males leading a predator away from a nest) or in attracting a species for reproduction (bees to bright flowers). Discuss the ways people can disrupt color in nature.

TERRARIUMS

Note: The teacher must ask permission of the naturalist or camp director before planning this activity.

Purpose: To make a miniature balanced environmental community.

Materials:

1. Plastic or glass jars: large glass coffee containers, pickle jars, gallon wine bottles, commercial size food containers. (The school cafeteria and restaurants are possible sources. As a safety precaution, plastic containers are recommended.)
2. Soil: While outdoors use the natural soil of the plants you wish to plant. Soil near rotted tree stumps is excellent. You may wish to prepare the soil before the trip if the site you are using has a policy against digging soil. A typical mixture is one part vermiculite, one part peat moss, and four parts sterilized top soil.
3. Rocks and/or activated charcoal
4. Plants: mosses, violets, ferns, other small plants

Procedure:

1. Dampen the soil mixture. Use approximately 1 to 3 inches of soil per foot of container height. In the bottom of the container place small rocks and/or activated charcoal for drainage. Rocks and soil should not occupy more than one-fourth the height of the container.
2. Select all plants from the same area since they probably require similar light, soil, temperature, and humidity conditions.
3. Dig a small hole in your terrarium and place a plant in the hole. Replace the soil and firmly press it around the plant. Do not overcrowd the terrarium. Plants touching each other may transmit disease to one another.

4. Rocks, tree bark, or shells may be added for interest.

5. Add a small amount of water. It is probably better to under water than to over water a terrarium. Clean the inside walls with a soft cloth if necessary.

6. The last step is to cover the container. Use the original top or clear food wrap.

7. Good lighting is essential for a terrarium's health and growth. Many terrariums have died from too much light and heat. Never place a closed terrarium in direct sunlight.

MEASURING THE RATE OF WATER CURRENT

Purpose: To measure the rate of water current

Materials:
Stick
Ruler or measuring device
Stop watch
String
Pencil, paper
Access to a creek

Time/Group: 30 minutes; any size group

Procedure:

1. Discuss causes and effects of moving water. Define current.

2. Tell students that they can calculate the speed of moving water by finding the answer to the question: How long does it take a stick to float 10 feet down the creek? (Have no more than three teams of two students per team work at a time along an area of the creek.)

3. Mark off ten feet in the creek with a 10-foot piece of string. Drop a stick in the creek upstream and find the number of seconds it takes for the stick to reach the end of the string (use the stop watch). Do this five times and record the number of seconds each time. Add the number of seconds and divide the result by five to find the average time it takes a stick to travel 10 feet.

4. Next, ask: How many feet will the stick move in 1 second? Have students divide the average time in seconds into 10 feet. Explain that the answer will give feet per second (FPS).

5. Tell students that they can find the rate of the creek's current by using the following method:

   To find how many miles per hour (MPH) the stick travels, multiply feet per second by 3,600 (3,600 seconds in an hour) and then divide by 5,280 (5,280 feet in 1 mile).

   FPS x 3,600 = FPH

   FPH ÷ 5,280 = MPH

MEASURING THE WATER VOLUME OF A STREAM

Purpose: To measure the volume of water in a given area

Materials:
Yardstick
Paper and pencil
A shallow creek

Time/Group: One hour; 30 maximum

Procedure:

1. Measure the depth of the creek in five spots across it. Divide the sum of the measurements by five to get the average depth.

2. Next measure the width of the creek where you took its depth. Multiply the width by the average depth to get the area in the cross section.

   width x average depth = area in square units

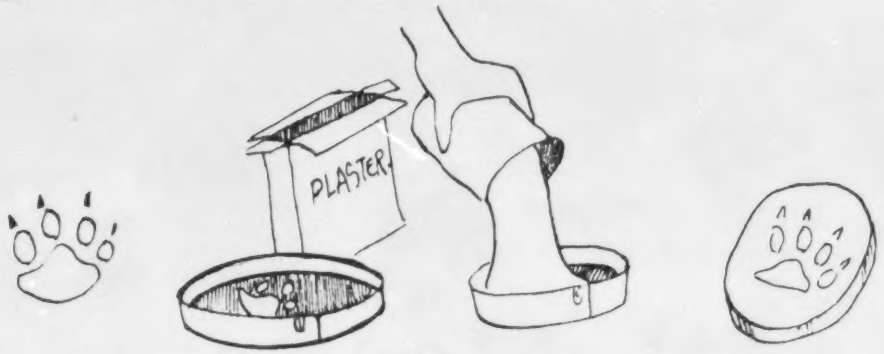
3. Using the method described in the preceding activity, find the rate of water current in FPS (feet per second). The amount of water passing any point of the stream in one second can be computed by multiplying the rate of the current by the cross section area at the point where the current speed was determined.

ANIMAL TRACKING

Purpose: To observe animal tracks

Materials:
Strip of cardboard
Paper clip
Plaster of paris
Water
Stick
Paper cup

Time/Group: 45 minutes plus drying time; 12-15 students



Procedure: Have students work in groups of 5 or 6. Give directions:

1. Find a suitable animal track. The best tracks for casting are found in mud; a deep impression makes the best cast.
2. Place a cardboard ring around the track. Secure with the paper clip.
3. Mix plaster of paris with water until it is the consistency of mayonnaise. (Each group can mix its own plaster of paris in a paper cup.)
4. Pour mixture into the ring and onto the track.
5. Let it dry for at least one hour.
6. Remove with care, using a spoon handle, knife, or other object that will lift the cast from the soil.
7. Carefully remove the soil.
8. Clean the cast with a dry toothbrush.

LEAF PLASTER CASTING

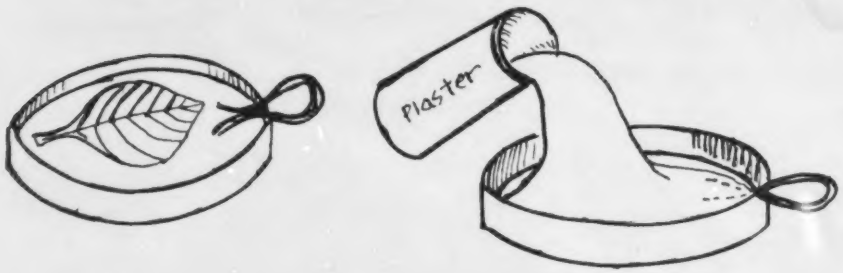
Purpose: To observe the vein structure in leaves

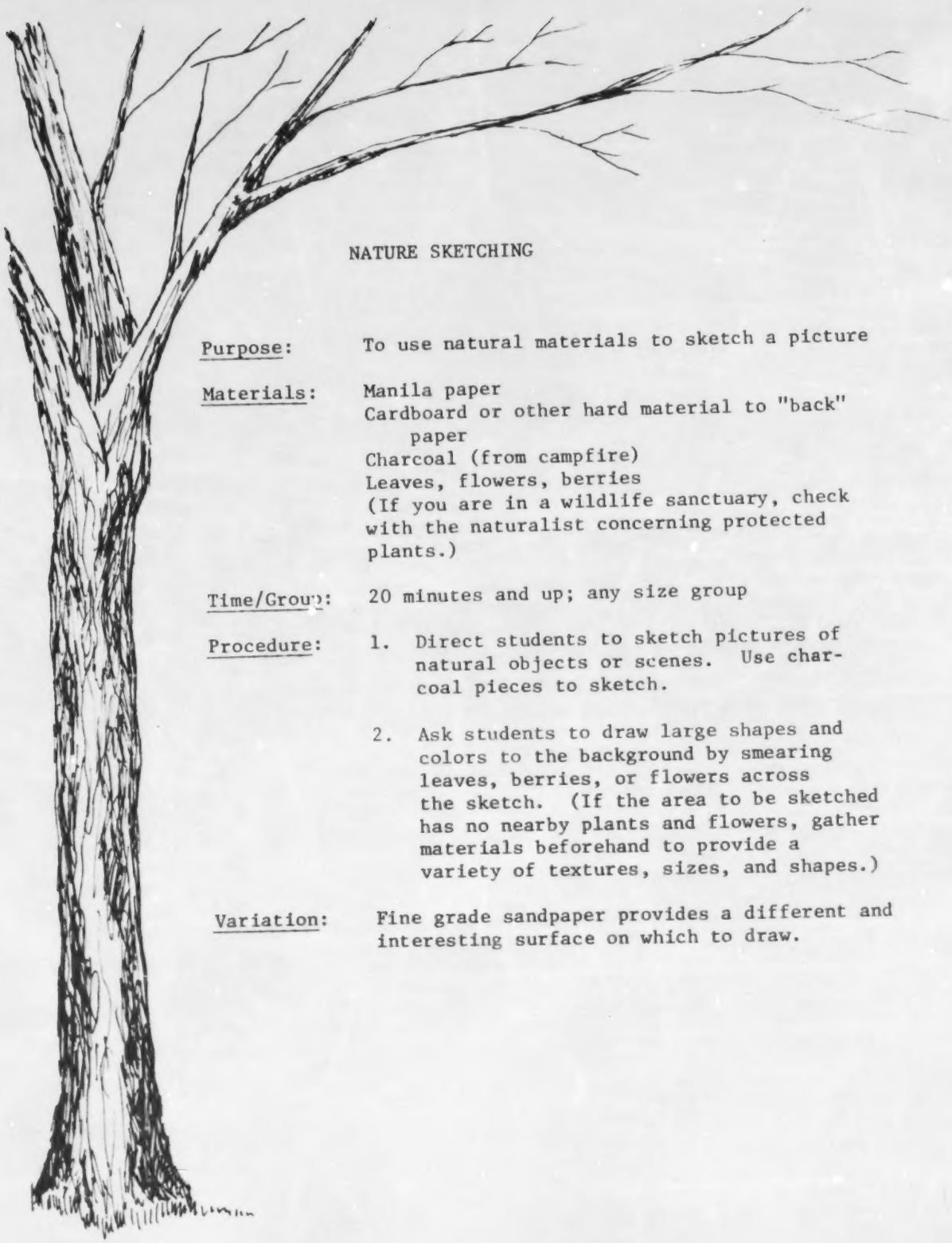
Materials:
Tagboard
String
Petroleum jelly
Plaster of paris

Time/Group: 45 minutes and drying time; 12-15 students

Procedure: Collect a variety of leaves. Prepare a 2-inch tagboard strip large enough to encircle the leaf being cast. Grease the leaf with petroleum jelly and place it vein side up on a piece of newspaper. Tie a piece of heavy string into a loop. Place the string loop into the cardboard ring so that half the loop is outside the ring. This will allow you to hang the plaque on the wall when it is finished. Then, very slowly pour some plaster onto the leaf and string loop. Fill the tagboard collar with the plaster.

Allow the plaster to dry for one hour. Remove the tagboard ring and peel off the leaf. Gently wash the cast with warm, soapy water. Paint the cast and the leaf print in contrasting colors or stain the plaque lightly.





NATURE SKETCHING

Purpose: To use natural materials to sketch a picture

Materials:
Manila paper
Cardboard or other hard material to "back" paper
Charcoal (from campfire)
Leaves, flowers, berries
(If you are in a wildlife sanctuary, check with the naturalist concerning protected plants.)

Time/Group: 20 minutes and up; any size group

Procedure:

1. Direct students to sketch pictures of natural objects or scenes. Use charcoal pieces to sketch.

2. Ask students to draw large shapes and colors to the background by smearing leaves, berries, or flowers across the sketch. (If the area to be sketched has no nearby plants and flowers, gather materials beforehand to provide a variety of textures, sizes, and shapes.)

Variation: Fine grade sandpaper provides a different and interesting surface on which to draw.

FINDING DIRECTION WITH A COMPASS

Purpose: To develop basic skills of map reading and compass use.

Materials: Minimum one compass per two students
Map
Stick (optional)

Time/Group: 30 minutes minimum; any size group

Procedure: Give directions for using the compass:

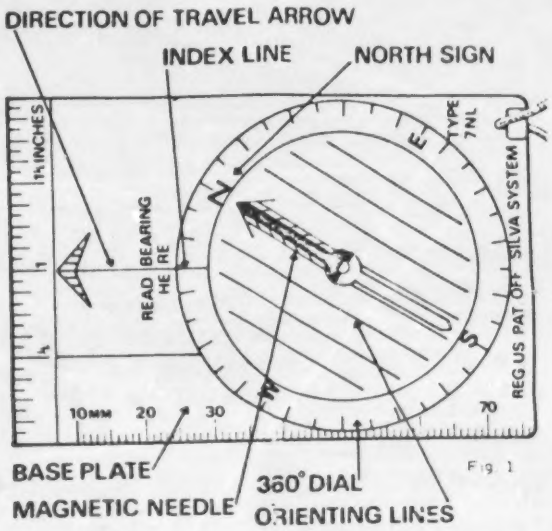


Fig. 1

1. Setting a bearing: To set a bearing simply line up the degree number (compass point) with the direction of travel arrow.

2. Hold the compass level in your hand (horizontal with the ground).

3. Orientate (turn) the compass around slowly until the north (red) end of the magnetic needle points to letter N on the dial. Point the Direction of Travel arrow toward your destination. Read the bearing at the index line.

Variations: Check your knowledge by trying the following test.

1. Place a marker on the ground at your feet. Set your compass in a direction between 0° and 120° (e.g., 40°). Walk on this course for 40 paces. Stop.

2. Look at your compass. Add 120° to your original degree (Example: 40° + 120° = 160°). Set this new bearing and walk 40 paces. Stop.

3. Again add 120° to your last bearing (Example: 160° + 120° = 280°). Reset the compass and walk 40 paces at that setting. Stop.

4. You should now be back at your original marker if you used the compass correctly.

Finding Direction Without a Compass

Push a staff upright into the ground (point A). During the morning hours draw a circle on the ground with the staff as the center and length of the staff's shadow as the radius (line AB).

Directions:

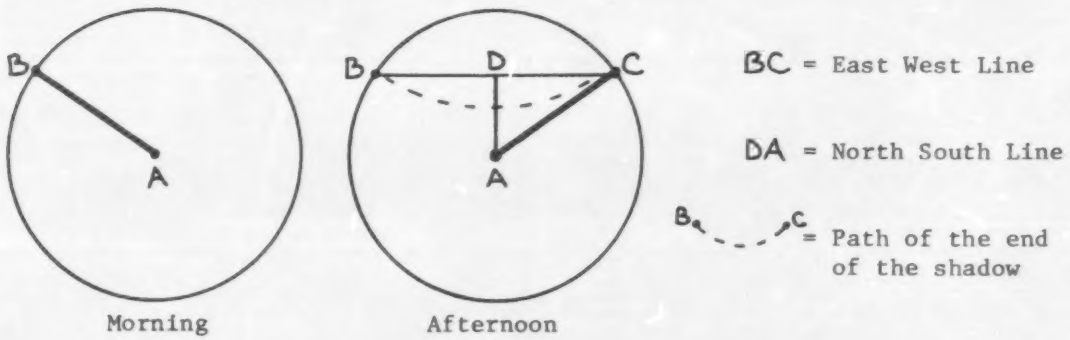
1. Tie one end of a string loosely around the staff, and tie the other end around a stick used for scratching.

2. Push a short stick into the ground at the point where the tip of the staff's shadow touches the circle (point B)--then wait. As the sun climbs in the sky the staff's shadow will become shorter; then, become longer in the afternoon.

3. When the tip of the staff's afternoon shadow touches the circle, place a small stick at the touching point (point C).

4. Draw a line from this stick to the stick placed that morning (line BC). The halfway point between the two sticks is the true north of the staff (point D). Scratch a line from this halfway point to the center stick for a N-S line (line AD).

Variation: If you do not have all day to do this, take readings at 11:00 a.m. and return at 1:00 p.m. Draw a line between these points. Find the midpoint by drawing a perpendicular line from the center staff. Add an hour during the winter to compensate for daylight-saving time.



100 INCH TRAIL

Purpose: To become aware of the world that is beneath one's feet and to observe miniature ecosystems

Materials: One 100-inch piece of string per student
Pencil, paper
Clipboard

Time/Group size: 30 minutes; 20 students

Procedure:

1. Give each student a piece of string 100 inches in length. Have them select a spot anywhere in the camp area to lay the string.

2. After each student has selected a spot, he/she will imagine himself/herself to be the size of an ant, and will pretend that the string is a nature trail. Ask the student to follow the trail, writing down his/her own experiences along the trail.

3. After approximately twenty minutes have students share their adventures along the hundred-inch hike!

Variation: Have the students design and draw a miniature layout of an interesting nature trail with their string, pointing out interesting features.

Lap Sit

Purpose: To develop group cooperation

Materials: None

Time/Group size: 15 minutes; 10-30 students

Procedure: Have students (standing) to form a circle. Have each student place hands on the hips of the person in front of him/her so the entire circle is united. Close the circle until everyone is touching the person in front. The object is to have the entire circle simultaneously to sit down on the knees of the person behind him/her when you give a predetermined signal.

Caterpillar

Purpose: To introduce a non-competitive indoor or outdoor physical activity for social interaction.

Time/Group size: 15 minutes; 10-30 students

Procedure: Have the students lie face down, close together, forming one long line. Have the first student in the line to roll over onto the next person and keep rolling down the line of bodies. When the student reaches the end of the line, he/she lies face down, and the next person begins. Continue until everyone has had a turn.

Variation: Have two caterpillar lines begin and continue across the terrain.

On My Way

Purpose: To identify objects and to use quick recall and sequencing of objects' names

Materials: Objects found by students throughout the camping experience

Time/Group size: 10-25 minutes; 10-30 students

Procedure: The teacher will begin the activity by saying "On my way to _____ I found a _____!" The teacher places the object found on a table in front of the group. The first student comes up to the table with an object in hand and says, "On my way to _____ I found (the teacher's object) and (his/her object)." The student then places his/her object on the table with the teacher's object. Each student, in turn comes up and does the same, naming all the objects laid on the table and adding one to the collection. Each student should be encouraged to choose different objects for the collection.

Variation: Use the alphabet rather than objects. The first person starts with a; the second person repeats a and adds b. By the end of the game one has to remember 26 items. Use with groups of fewer than 10.

Star Struck

Purpose: To identify constellations and how constellations got their names.

Materials: Chalkboard or large drawing paper
Picture of stars in a random pattern
Felt-tip marker or chalk

Time/Group size: 30 minutes; any size group

Procedure:

1. Hold up a picture of drawing of the stars in a constellation or randomly scattered on a page. DO NOT outline the shape they form.

2. Discuss constellations with students for about five minutes, asking them if they know any names or shapes commonly seen in the sky.

3. Take down the picture of the stars and ask for a volunteer to draw on the chalkboard what he/she remembers.

4. When the student has put the "stars" on the board, connect the dots (stars) and ask the class what the name of this "constellation" might be. If it looks like a bathtub it may be called the Bathtub or Scrubdub constellation.

5. Have the students invent a legend about their constellation by going around the room and having each child say five words about the constellation and how it happened to be arranged as it is, or start a sentence that each child adds onto. Record what is said. Then have a student read the entire story of the "Scrubdub" constellation.

6. Show pictures of common constellations; then take your students outside to try to find them on a clear night.

MUSEUM

Purpose: To collect natural objects which can be used for scientific study, research, and vocabulary development.

Materials: Check with the naturalist for good places for limited collecting. (Objects should be brought back to school for permanent display.)

Time/Group size: Time and group size will vary.

Procedure:

1. Select any natural object from your museum.
2. Introduce the object by discussing the five senses and how they help us learn.
3. Ask students to describe the object. Write their descriptive words on a 24" x 36" vocabulary chart.
4. Ask each student to use the word he/she suggests in a sentence.
5. Allow ten minutes for the students to write a paragraph using words from the chart. (They may also select a minimum of ten spelling words.)
6. For the final ten minutes have students find a partner and take turns giving and taking a spelling test. For each letter in a word spelled correctly, student receives one point.

Variation: Any man-made or natural object can be used to generate vocabulary and give spelling practice.

AROUND THE CAMPFIRE

Collect wood and kindling early in your trip. Store some in a dry place. The dining hall at Camp Piomingo is a good place for a rainy night campfire.

Have an emergency fire bucket at the site of the fire. Make sure fire is completely out when leaving.

Group singing, storytelling, or fire watching are great fun.

Skits for the occasion should be practiced at school before coming to camp.

Marshmallows are great favorites. Be sure to find roasting sticks before dark.

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Photograph, Copyright 1981, The Louisville Times. Reprinted with permission.

Great things are done
When men and mountains meet;
This is not done by jostling
In the street.

-- William Blake

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HIGH ADVENTURE ACTIVITIES

The Project I.D. resource center at camp offers High Adventure Activities that students and teachers can experience. All these activities are supervised, and students and staff receive appropriate instruction in the sport and safety considerations. Note: Do not attempt to do these activities without qualified staff and appropriate safety equipment.

High adventure activities relate directly to a particular outdoor environment (cave, water, hills, mountains, rocks, woods, streams, rivers) in which individuals' can excel mentally, physically, and emotionally. Experience often enhances one's personal success. Competition exists between an individual and his/her environment rather than among individuals and groups. Emphasis is not on winning or losing but rather on facing the challenge of the natural environment.

Outdoor adventure pursuits provide people with inherently meaningul experiences. Some goals of the program are--

To increase the participant's sense of personal confidence.

To increase mutual support within a group.

To develop an increased level of motor skills, agility, strength, endurance, and physical coordination.

To develop an increased joy in one's physical self and in being with others.

To develop an increased familiarity and identification with the natural world.

It is emphasized that safety procedures will have carry-over value into leisure and recreational activities. Example: Student goes rafting and learns the safety rule emphasizing wearing coast guard certified life jackets. His/her learning may carry-over to other recreational activities (e.g., boating, fishing, water skiing).

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To receive maximum benefit from these activities, it is important to prepare all participants. This might include the following:

- Arrange for Project I.D. staff to visit and show slides.
- Arrange conversation with students, teachers, parents, and others who have successfully participated in the activity.
- Introduce vocabulary associated with the activity.
- Secure films, filmstrips, stories, speakers, and other resources regarding the specific activity. This can make the activity relevant to the specific content of your curriculum.

High Adventure Activities offered include caving, ropes course, night hike, rappelling, climbing, and rafting (flat). Following is a description of each activity and information about its availability and use.

Field Experience: Caving

Purposes:	To experience a cave environment. To cooperate with others to achieve a common goal.
Materials:	Flashlights and helmets (provided by Project I.D.) A complete set of dry clothing (provided by each student)
Time/Group size:	2 hours; not to exceed 15 (Time includes walking from camp site to cave, cave tour and exploration, and returning to camp site.)
Note:	Project I.D. provides one staff member as a guide. One adult must accompany each student group.
Variation:	Two groups (accompanied by two adults) can go to the cave area at the same time. One group explores the cave while the other participates in a teacher-facilitated activity in the area (e.g., stream exploration, scavenger hunt, exploration of living and non-living environment of cave entrance area to compare and contrast with living and non-living environment of the cave, or picking up trash and litter as a service project).

The in-cave activity may include one or more of the following topics for discussion:

Cave temperature

Cave formation

Formations found within the cave (stalactite, stalagmite, columns, drapery, mineral deposits)

Living and non-living things found in the cave

Students should be encouraged to explore; lead and sweep positions would be held by students.

Students should be given the opportunity after the first 100 yards or so to decide whether to continue or not.

Describe how you feel when: you get wet and dirty; there is complete darkness and total silence; someone trips you; you crawl through a tight squeeze or up a waterfall; you get lost or do not remember the way out; you had to depend upon someone else or had to help someone you did not like.

What is the difference between the dark in a cave (complete absence of light) and the dark of night (there is always some light for your eyes to adjust to)?

Does the cave change inside with the seasons like your backyard? How? Why?

Follow-Up Ideas

After exploring a cave, students may make a collage; make a model of a cave interior; research a cave cricket, bat, or some other living thing; research other caves in and around Kentucky.

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Field Experience: Rappelling And Rock Climbing
(Grades 5-12)

Purpose: To experience the rappelling process.
To identify and practice making the following knots: overhand, water, bowline, and figure 8.
To identify proper equipment and its use.
To become familiar with the vocabulary for equipment and commands when rappelling (i.e., belay, rappell, anchor).

In successfully rappelling or climbing the students have a chance to:

- Meet moderate amounts of stress successfully.
- Overcome fears.
- Develop self confidence.
- Use learned climbing skills and proper equipment to ensure safe participation.
- Improve conditioning, balance, strength, agility, coordination, and logic for safe and enjoyable participation.
- Correlate the activity with possible vocational implications.

Materials: Rappelling equipment (provided by Project I.D.)--ropes, helmets, carabiners, harnesses and a figure 8

Note: Project I.D. supplies one staff member as an instructor for the program.

Time/Group size: 2 1/2 hours; 15 miximum
(Time includes walking, setting up the rappell instructors, and the actual rappelling.)

Discussion Topics

- Height and slope of cliff
- Rock types and formations on the cliff
- Weathering and examples of weathering
- Initial feelings/reactions to the rappelling process
- Feelings after rappelling
- Gravity and how it affects rappelling
- How friction is involved in physics
- Trust between the instructor (the teacher) and the student (the belayer); trust in the equipment
- Uses of cliffs by pioneers and Indians who lived in the area

*Rappelling is a method of controlled descent.

Field Experience: Night Hike

Exploring the world at night can be a most rewarding experience. The group should leave the flashlights behind so as not to disturb the fauna which abounds at night. One's eyes will adjust to night vision only if all flashlights and other sources of illumination are not used. The stars, the moon, even the shadows become more brilliant as eyes adjust to the night. It takes about 45 minutes for pupils to dilate fully. It is also necessary that the leader be familiar with the area where the night hike is conducted.

Purposes: To experience the outdoor world at night
To encourage a feeling of comaraderie by making the members of the group dependent upon one another

Materials: None, unless a long rope with hand loops tied every four feet is needed for younger students or for night bushwacking.

Opportunities for discussion

- Before you go on a silent night hike, talk about the five senses. Have the students concentrate on their five senses throughout the trip. This increased awareness and concentration will allow the students to discover more things at night.

- Define and discuss phosphorescence. Tell students to look for it on their hike.

- While on the hike choose a large flat area, and have all students lie on their backs. Ask them to be as still as possible. Let the group remain in this position for at least five minutes, while listening, looking, and imagining. After five minutes let students sit up and discuss what was heard and what could have made the sounds they heard.

- Ask students to express their opinions about what animals are nocturnal and why they are active in the night.

Field Experience: Rafting

Exploring the banks of the Ohio in rafts is an exciting experience. A short introduction should be given on how to paddle and what safety precautions are necessary. All participants must wear the provided life jackets and follow the instructions of the experienced river guide. The current will determine the course of the exploration. With a strong current the rafts will stay on the Kentucky shoreline, but on many days when the current moves slowly the river can be crossed, and the opposite banks can be explored.

Purposes: To identify safety procedures for rafting
To explore a section of the Ohio River

Materials: Project I.D. will supply one water safety staff member as well as the rafts, paddles and life jackets.

Time/Group size: 2 1/2 hours; limited to 15
(Walking to the river, blowing up the rafts, and paddling takes about 2 1/2 hours.)

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Opportunities For Discussion

- Determine direction and speed of the current and relate it to industry on rivers, seas and other large bodies of water.
- Use nets to find the aquatic life in the river. Discuss findings.
- Use the water and stream study kit to do water tests, river bottom studies and effects of pollution.
- Make shoreline investigations. Notice types of driftwood.
- Make quadrant studies of plant life along various sections of the bank.
- Interview the people seen along the shore to determine why they are on the river.
- Discuss how, why, and what is transported on the river.
- Investigate the history behind some of the buildings on the shoreline.
- Let students express ideas about what happens to the fish in the river when it freezes.

Follow-Up Ideas

- Make a model of the river showing the towns along it.
- Make a model of a flatboat and describe the differences between it and a raft.
- Research how the Indians and the pioneers utilized the river.
- Research ideas on keeping the river clean and safe.

Field Experience: The Ropes Course

Purposes: To enhance balance, coordination, agility, strength, and overall body fitness.
To provide mental and physical challenges through an enjoyable activity.

Time/Group size: 15 minutes per person; 15 persons maximum

Materials: At Camp Piomingo there is a nine-move ropes course consisting of the following:

- An inclined log
- A balance beam
- A tire walk
- Cargo net
- Tight wire with overhead rope
- Kitten crawl
- Tight wire with balance rope
- Tire swings
- Fidget ladder

Procedure: The object of the ropes course is for the student to make it through all of the moves without touching the ground. Plan for a stretching session to limber up bodies before students begin to use the course. Supervision of the course is necessary to prevent horseplay and to ensure safety.

Advance Preparations

Rain is an integral part of the environment. A shower, or light rain does not stop the program. DO NOT HIKE DURING LIGHTNING. Boots and raincoats should be a part of the clothing list. One idea for a raincoat is a large plastic trash bag. Teachers do need to include activities which could take place indoors or in a sheltered area. The key is to have a plan when rain just will not stop and you have 32 active students.

A good suggestion for hikes when the ground is damp is a "sit upon." Students can make these by putting several sections of newspaper into a plastic bag. Sit-upons can be carried along on the hike to use when the students do some activity requiring sitting or to rest and discuss something they have seen.

Otter Creek Park has several large pavilions suited perfectly for dances and sing-alongs. They offer another place to get out of the rain.

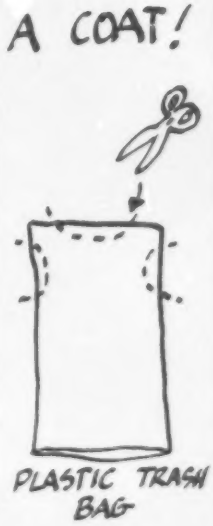
Make sure on the first day to collect enough wood for fires and to store it in a dry place.

The best of planning cannot control the weather, but the teacher with foresight can bring a "goody box" for use if the weather forecast includes heavy rain and thunderstorms. A trip to the Multicultural Resource Center at Durrett Annex is very worthwhile.

Make arrangements for use of a movie projector, tape recorder, filmstrip projector and/or record player. Tempera paints, plaster of paris, games, creative dramatics, and square dances are all possibilities.

Check out movies, filmstrips, records, and tapes from the Multicultural Resource Room. Your local school may have square dance records and filmstrips that you may borrow. The art teacher could help with clay, paint, yarn.

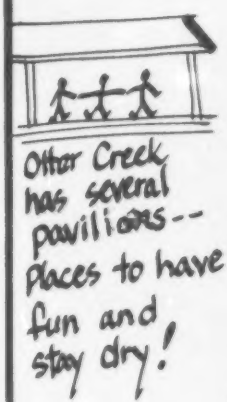
Project I.D. at Otter Creek Park will provide some of the equipment for rainy day emergencies. Teachers need to check with the staff and coordinate equipment and materials in advance.



Indoor Activities

The following is a list of suggestions for things to do with students indoors:

- Songs and singing games can be played.
- Dancing and new games can be held at the Pine Hill Pavilion.
- Have a library of books to read aloud--ghost stories and other spine chillers are always favorites.
- Have students write a journal or give them journals of camp work sheets and drawing pages.
- Have each cabin unit prepare a skit, create props and meet in the dining hall for presentations.
- Comics are always welcome.
- Games such as cards or board games can be used in emergencies.



EVALUATION

The process of evaluating is often the most neglected aspect of a camping program, but probably the most important. The evaluation could take forms such as the following:

- Written questionnaires completed by students and parents after the camp experience
- Debriefing sessions with teachers who participated, discussing problems and how to solve them, but emphasizing the successes
- Observations of student behavior and attitude
- Review of the impact of the experience on student's total performance (e.g., absences, disciplinary referrals, grades)
- Photographs of students taken during the camp used to stimulate discussion and creative writing in the classroom
- A journal written by individual students and/or a group

Evaluation can be a powerful tool in obtaining support from the parents, local administrators, Parent Teacher Associations, and outside fund-raising sources.

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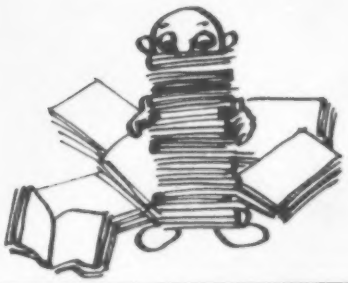

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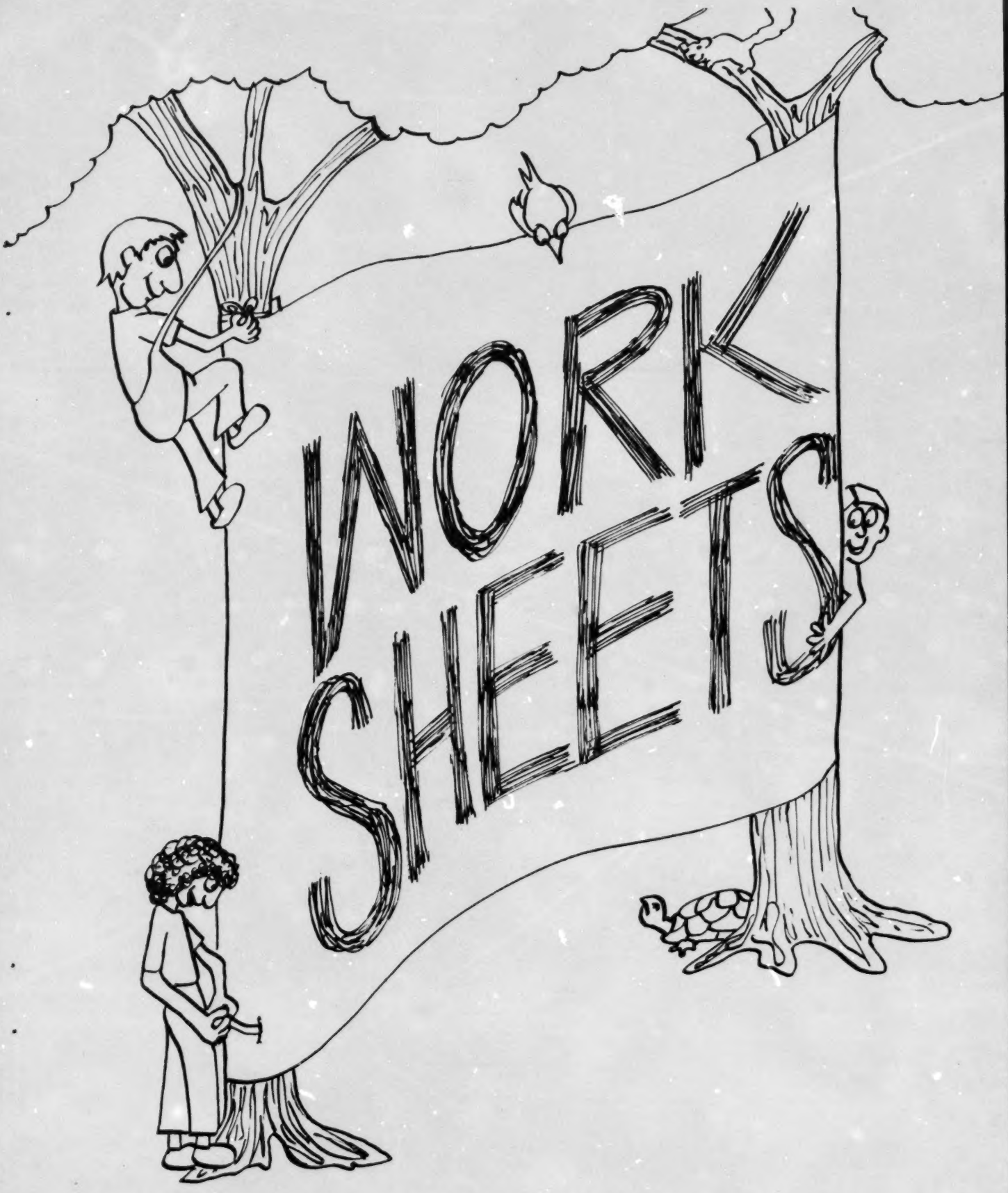
ENVIRONMENTAL EDUCATION ORGANIZATIONS

NAME	ADDRESS
*American Forest Institute	1619 Massachusetts Avenue, N.W. Washington, DC 20036
Association of Interpretive Naturalists, Inc.	International Business Office 6700 Needwood Road Derwood, MD 20855
Center for Environmental Education	2100 M. Street, N.W. Washington, DC 20037
Defenders of Wildlife	1244 Nineteenth, N.W. Washington, DC 20036
Elsa Clubs of America & Elsa Wild Animal Appeal	P.O. Box 4572 North Hollywood, CA 91607
Forest Service U.S.D.A. Southern Region	1720 Peachtree Road, N.W. Atlanta, GA 30309
4-H	435 South 5th Street Louisville, KY 40202
Girl Scouts, Kentuckiana Council	724 West Main Louisville, KY 40202
Greenpeace	2108 W. 4th Avenue Vancouver, B.C. Canada
Kentucky Association for Environmental Education	Center for Environmental Education Murray State University Murray, KY 42231
Kentucky Department of Energy	Capital Plaza Tower 12th Floor Frankfort, KY 40601
Kentucky Department of Fish and Wildlife Resources	Public Relations Department Frankfort, KY 40601

NAME	ADDRESS
Kentucky Department of Natural Resources and Environmental Protection	Pine Hill Plaza Frankfort, KY 40601
*Massachusetts Audubon Society	Lincoln, MA 01773
*National Association of Conservation Districts	701 E. Main P.O. Box 158 Harper, KS 67058
National Association of Environmental Education	P.O. Box 560931 Miami, FL 33156
*National Audubon Society	950 3rd Avenue New York, NY 10022
*National Wildlife Federation	1412 16th Street, N.W. Washington, DC 20036
*Population Reference Bureau, Inc.	1337 Connecticut Avenue, N.W. Washington, DC 20036
U.S. Environmental Protection Agency	Office of Public Awareness Washington, DC 20460
U.S. Department of Energy	Hannah Mayfield Department of Energy Technical Information Center Oak Ridge, TN 37830
*U.S. Department of the Interior	Fish & Wildlife Service Washington, DC 20242
*U.S. Forest Service	Public Information Room 816 1720 Peachtree Road, N.W. Atlanta, GA 30309

For additional listings see the 1981 KAEER Fair Resource Guide.

*Organizations which are asterisked provide free educational materials upon request.


WORK
SHEETS

WHAT DO I WEAR TO CAMP?

Jefferson County Public Schools

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

DURRETT ANNEX
4409 Preston Highway
Louisville, Kentucky 40213

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FIELD TRIP PERMISSION AND RELEASE

The undersigned parent (or guardian) of _____
(Student's Name)

hereby gives permission for the above named student to accompany

_____ on a field trip
(Teacher or Sponsor)

to _____ on _____ (Date of Trip)

Transportation will be by: ☐ Commercial bus ☐ School bus

In consideration of the advantages of this field trip, the undersigned agrees that the Board of Education of Jefferson County, Kentucky, its agents and employees, and the driver and/or owner of the vehicle used for the field trip shall be exempt from liability for damages for bodily injury or property damage that might occur during the trip, except to the extent of insurance liability as provided by law.

_____ _____ Parent or Guardian
(circle one)

_____ Date Signed

F-424-1

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Jefferson County Public Schools

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

DURRETT ANNEX
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MEDICAL INFORMATION

Child's name _____

Does your child walk in his/her sleep? _____

Does your child require any medicines, vitamins? _____

_____

Do we have permission to give your child an aspirin? _____

Does your child have any allergies to plants, animals, food? Specify.

_____

Are there any other factors which may affect the care of your child while at camp? _____

_____

Does your child have a problem with bed-wetting? _____

Family doctor's name _____ Phone _____

Parent's signature _____ Date _____

Parent's address _____ Phone _____

Emergency contact _____ Phone _____

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Dear Parents,

As you probably have heard, our class will be going on a resident environmental education trip. In order to plan the length of the trip and the variety of experiences that can be offered, I need your help.

If you can help us before we go to camp by collecting items needed or if you can be of assistance either part-time or full time while at camp, it will make our outing a richer experience.

I am interested in my child going to camp. yes ___ no ___

NAME _____ PHONE: _____

CHILD'S NAME _____

I am interested in giving time prior to going to camp.

Am able to _____. Am not able to _____.

I can stay at camp. yes ____ no ____
If yes, Part-time _____, full-time _____.
If part-time AM _____ AFTERNOON _____ EVENING _____

My abilities are (Please check.)

Fund raising _____ Typing _____

Hiking _____

Supervising activities:

Science _____ Art _____ Recreational _____

Cooking _____ Other (Specify) _____

Thank you for being a part of what we are doing.

Sincerely,

105

Jefferson County Public Schools

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SAMPLE LETTER TO PARENTS

Dear Parent,

We are planning a _____ day camping trip. This will provide outdoor experiences in environmental education for your child.

Our principal, _____, and the regional superintendent, _____, have granted us permission to plan this program.

This experience will broaden the student's view of the environment, help develop an independence that is healthy, allow for interaction with teachers and students on a more informal level, and incorporate the year's curriculum into a total learning experience.

There is a scheduled meeting of parents on _____ (day), _____ (date) at _____ (time) in _____. You or someone representing your child must be present.

Please feel free to call if you have any questions.

Sincerely,

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Jefferson County Public Schools

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

VANHOOSE EDUCATION CENTER
3332 Newburg Road
Louisville, Kentucky 40218

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DEPUTY SUPERINTENDENTS
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C. B. Young, Jr.

Dear Parent,

Much of the preliminary planning for the environmental education program is completed. Thank you for your interest and comments. We could not have gotten this far without your help and support. We want you to know about the arrangements and plans. (Give specific information about the following details.)

Dates
Departure time
Return time
Transportation arrangements
Arrangements for those not going

Please read the enclosed material carefully, and return the medical information form and the field trip permission and release form to the school by _____.

Sincerely,

Attachments:

Field Trip Permission and Release
Medical Information (Indicate that this form is to be returned to school.)
Suggested Clothing and Equipment List

SUGGESTED CLOTHING AND EQUIPMENT LIST FOR EACH STUDENT*

BEDDING: Sleeping bag or 2-3 blankets and sheets, pillow and pillow case if desired. (Be prepared for cool nights.)

CLOTHING: Old but clean clothing. New clothing may look like old clothing when children get home. Clothing should be marked with the student's name.

- One pair of pajamas
- Daily change of socks and underwear
- Warm jacket and sweater
- Raincoat and boots
- Two or three pairs of trousers or jeans--no dresses
- Two pairs of shoes--do not bring sandals
- Heavy and light shirts
- Handkerchiefs
- Hat
- Gloves or mittens, and a cap in cold weather

TOILET ARTICLES:

- Toothpaste and toothbrush
- Soap
- Bath towel and washcloth
- Chapstick
- Comb

GENERAL EQUIPMENT:

- Flashlight
- Envelope and stamp or postcard
- Pencils and notebooks
- Book or other reading material

OPTIONAL EQUIPMENT:

- Binoculars
- Camera
- Compass
- Fishing pole and equipment

DO NOT BRING:

- Money
- Radio
- Knife
- Food or soft-drinks
- Chewing gum
- Comic books and card games
- Firearms and archery equipment
- Axes and saws
- Matches
- Cigarettes

Teachers and parents accompanying groups may also wish to bring the following:

- Watch
- Alarm clock
- Pocket knife
- Radio (for news and weather)
- Filmstrips
- Tape recordings
- Records

*Be sure that everything you bring is labeled properly!

MINI - FOREST WORK SHEET

In this exercise, pretend that you are an insect looking at an environment as big as an arm-circle of lawn or grass. You will discover that many plants and animals can live together in a small community.

1. Lie on the ground, face down.

2. Use a piece of string to make a circle on the ground in front of you.

3. Spread the grass apart, and describe what you see (dead leaves, twigs, litter from people).

_____

_____

4. How many kinds of plants can you name in this circle?

_____ _____

_____ _____

5. What tiny animals can you name crawling through the grass? (If none, "Why do you suppose there are no animals here?")

_____

_____

6. What might be different in your circle tonight?

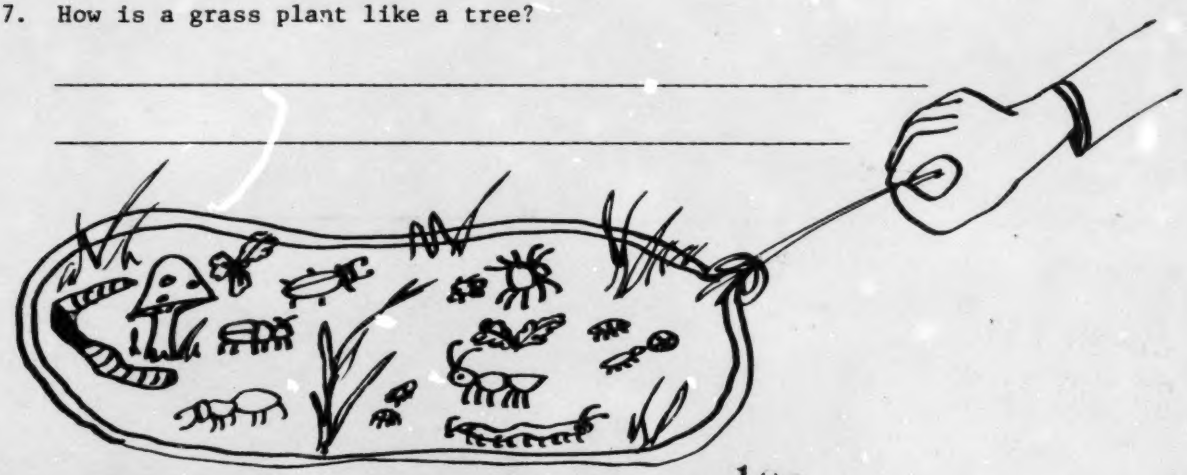
_____

Next winter? _____

7. How is a grass plant like a tree?

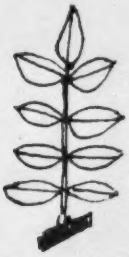
_____

_____



Leaf Study Sheet

Simple Leaf



Compound Leaf

Alternate Arrangement of Leaves

Opposite Arrangement of Leaves

Whorled Arrangement of Leaves

Palmately Compound Leaf

Pinnately Compound Leaf

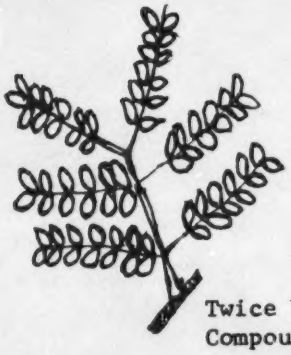
Two Examples of Lobed Leaves

Parallel Veins

Palmate Veins

Pinnate Veins

Arcuate Veins



Twice Pinnately Compound Leaves

Leaf Activity Sheet

Leaf	Are the leaves in an opposite or alternate arrangement?	Is the leaf simple or compound?	Is the edge smooth or jagged?	Is the leaf round-shaped?	Sketch the leaf.
1					
2					
3					
4					
5					
6					

HISTORY FOUND IN A CEMETERY

Tape a sheet of paper flat on the tombstone. Rub the paper gently with crayon or pencil. (The lettering will appear on the paper.) Be careful not to get crayon marks on tombstones. Examine the tombstones and fill out the work sheet.

1. What was the span of the oldest person buried here?

   _____

2. What was the life span of the youngest person buried here?

   _____

3. Write two epitaphs. _____

   _____

   _____

4. Whose grave is the most recent? _____

5. List some family names.

   _____

   _____

   _____

   _____

(Teacher may add other questions.)

ANIMAL CLASSIFICATION

Classify the animals pictured below.

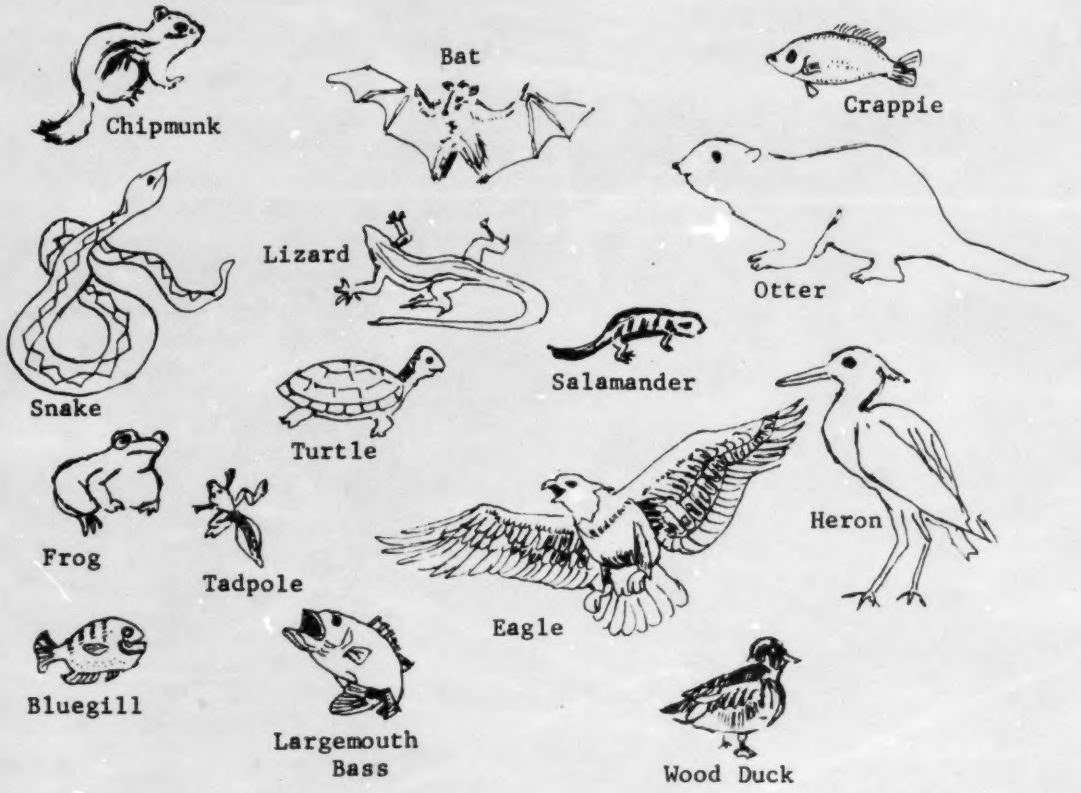
A. Mammals _____ _____ _____

B. Birds _____ _____ _____

C. Reptiles _____ _____ _____

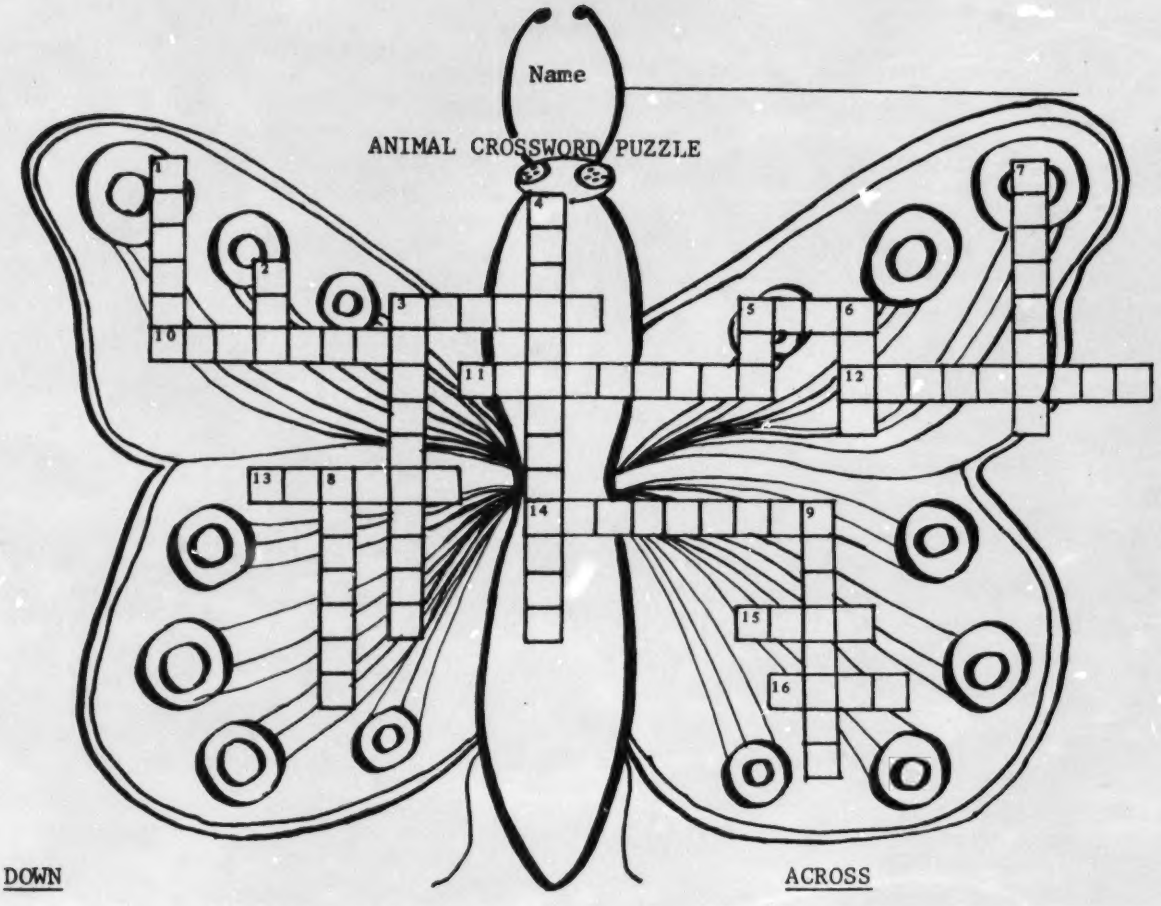
D. Amphibians _____ _____ _____

E. Fish _____ _____ _____



Name _____

ANIMAL CROSSWORD PUZZLE



DOWN

1. A small crustacean which is good to eat
2. A very small insect which lives in a colony
3. The sponge and corals belong to this group of animals.
4. Animals without a backbone
5. A common house pest which carries germs and whose young are called maggots
6. A male is known as a billy and a female is known as a nanny.
7. I am an arachnid. My stinger is located in my tail, and I live in a warm area.
8. The largest group of invertebrates
9. I have a spiny skin and five appendages.

ACROSS

3. I am a female ancestor. I give birth to the young.
5. I begin life as a tadpole, and when my lungs develop, I can leave the water and breathe air.
10. I am a one-celled animal.
11. I begin my life as a worm, then turn into a beautiful winged creature.
12. The class of invertebrate animals which has jointed legs
13. I have eight legs and make a web.
14. I contain a group of animals that might sting or bite you.
15. My segmented body makes good fish bait and aerates your yard.
16. I am usually found on a dog and drink blood.

NATURE SCRAMBLE

Unscramble the following words associated with nature and outdoor activities.

1. aefrimpc _____
2. erte _____
3. smmraolwhal _____
4. efla _____
5. bacni _____
6. feasty _____
7. giwt _____
8. ancro _____
9. keih _____
10. oemks _____
11. fodo _____
12. senak _____
13. ttlure _____
14. wakh _____
15. rvire _____
16. thgilhsafl _____
17. mcath _____
18. posa _____
19. rede _____
20. siofsl _____
21. vcea _____
22. limnaa scktar _____
23. atnuer _____
24. atph _____
25. pemla _____

LOOK FOR LEAVES

DIRECTIONS: FIND LEAVES TO MATCH THE LEAVES BELOW.

SHAGBARK HICKORY

CEDAR

SASSAFRAS

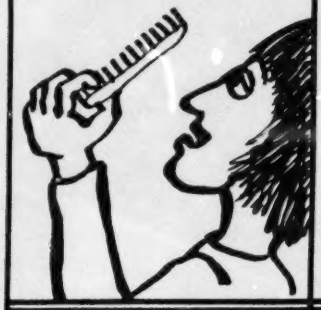
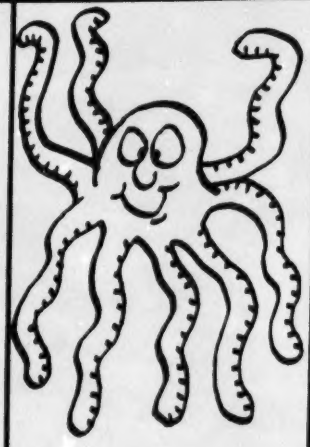
BLACK OAK

A LEAF THAT LOOKS LIKE A FACE

A LEAF THAT HAS BEEN SOMETHING'S FOOD

SCAVENGER HUNT

Directions: Find one of each thing described below.

Something that does not belong there	Something BLUE	A piece of wood that looks like something ALIVE!	A fossil
			
Two (2) different kinds of leaves	**Something that came from the water**	**Something very old**	**Something new**
			

SCAVENGER HUNT

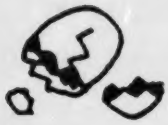
Directions: Find each of the following items. EACH item is worth one point.

A FEATHER

SAND

A BUCKEYE

A BONE



AN EGGSHELL

PART OF A SNAKE SKIN

A BUTTERFLY

A SHELL

AN EROSION-ROUNDED PEBBLE

A THORNY LEAF OR STEM

AN ALUMINUM CAN

PINE NEEDLES

CLAY

A ROOT AT LEAST ½ FOOT LONG

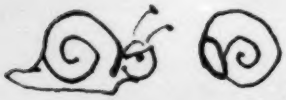
(1) BERRY EACH OF: WHITE, YELLOW, BLUE BLACK, RED

A STALK OF GRASS GONE TO SEED

SCAVENGER HUNT!

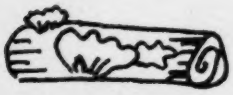
Directions: Find each of the following items.

A MUSHROOM


A SNAIL
OR SHELL

A FROG
OR TOAD

A WORM
OR CATERPILLER


A FUNGUS

4 FLOWERS OF WEEDS AND OTHER PLANTS

A BEETLE

6 DIFFERENT KINDS OF SEEDS

AN ACORN

A FERN

CLOVER

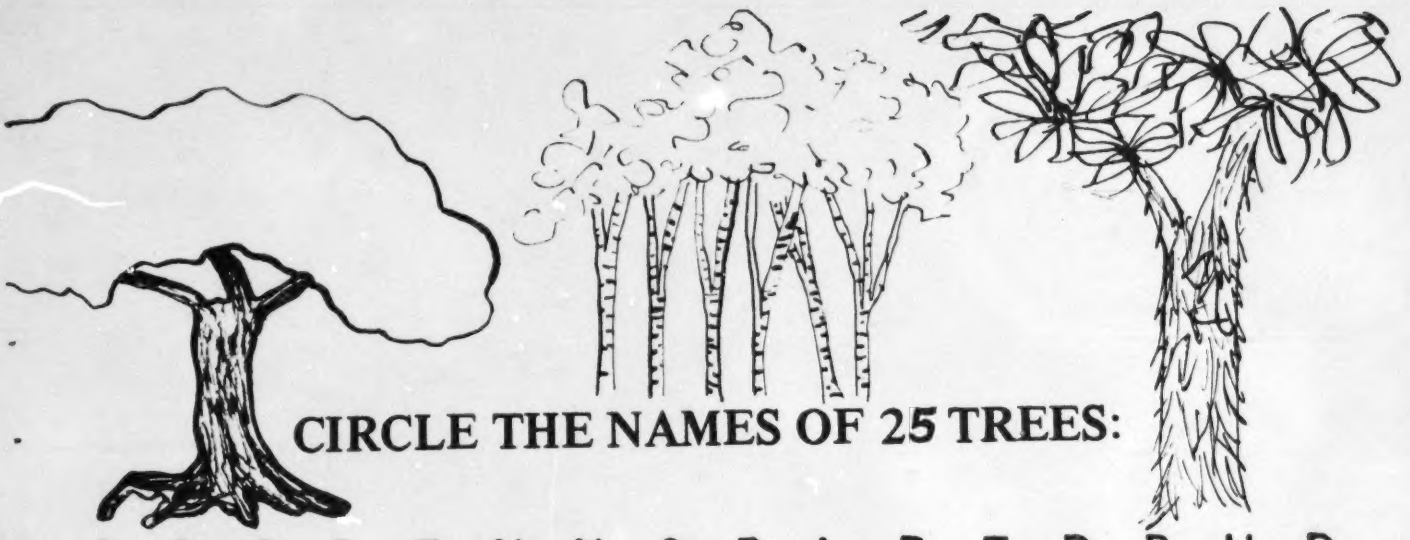
A PINE CONE

A DRAGONFLY

AN ELM LEAF

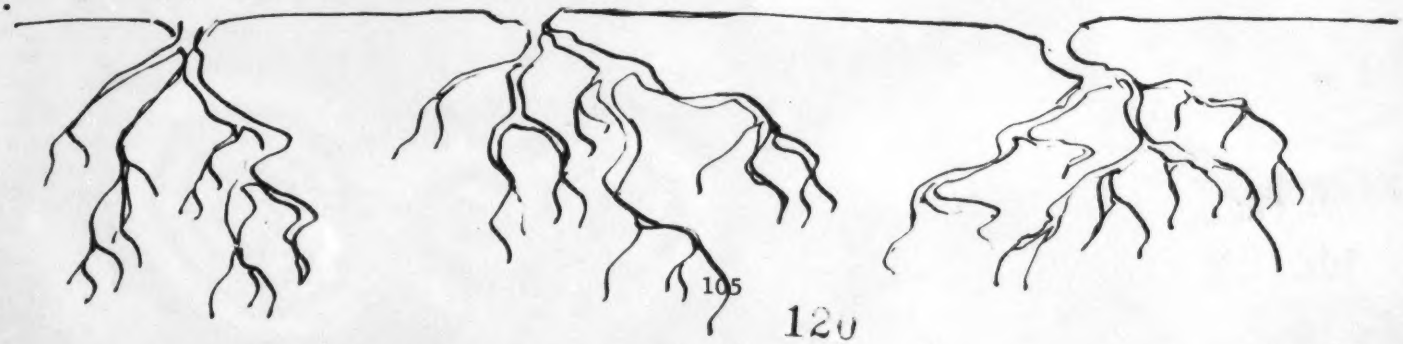
AN ANT

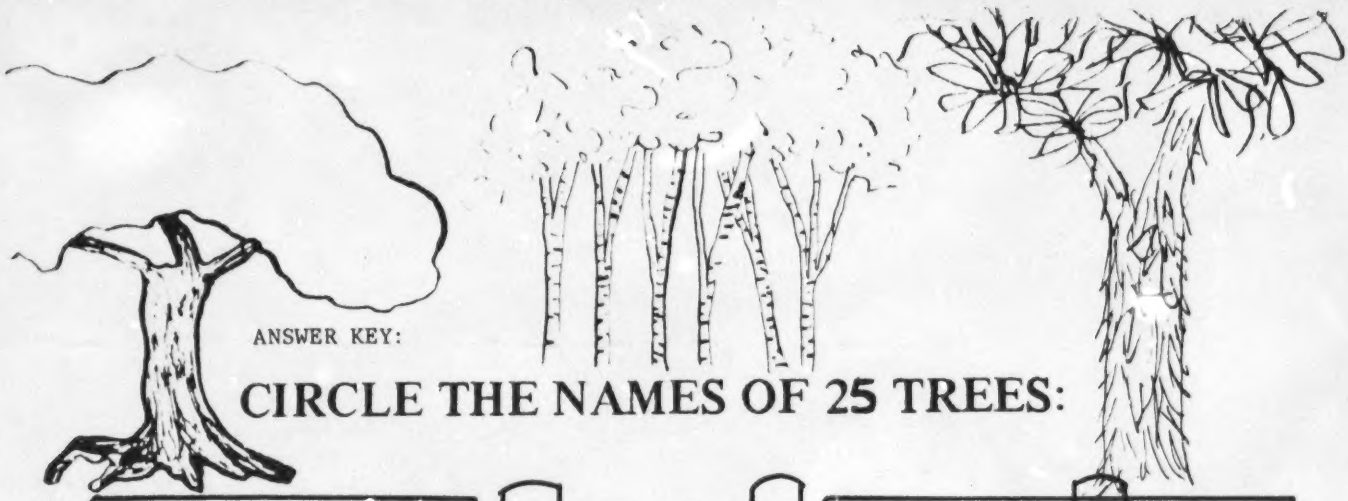
A MOTH
OR COCOON



CIRCLE THE NAMES OF 25 TREES:

J A S P E N Y C D L R E D B U D
F Q U T R H E M L O C K G I J O
O A K W I L L O W C H E R R Y J
C L N P S T L V E U D F H C A Z
M D O G W O O D P S M W C H B Y
B E E C H B W R G T R F E I L P
O R E D M A P L E C A T A L P A
X S L O S S O C E D A R G K F O
E W M H B H P B U T T E R N U T
L E U T G B L A C K W A L N U T
D M P I W Y A P P L E D D N O F
E H I C K O R Y M U L B E R R Y
R A N C O T T O N W O O D B T H
P K E B A S S W O O D H O L L Y

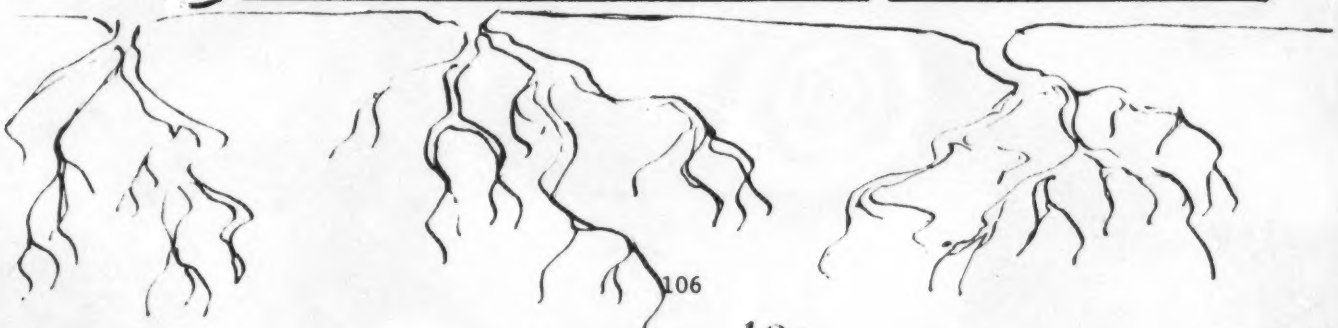




ANSWER KEY:

CIRCLE THE NAMES OF 25 TREES:

J	A	S	P	E	N	Y	C	D	L	R	E	D	B	U	D
F	Q	U	T	R	H	E	M	L	O	C	K	G	I	J	O
O	A	K	W	I	L	L	O	W	C	H	E	R	R	Y	J
C	L	N	P	S	T	L	V	E	U	D	F	H	C	A	Z
M	D	O	G	W	O	O	D	P	S	M	W	C	H	B	Y
B	E	E	C	H	B	W	R	G	T	R	F	E	I	L	P
O	R	E	D	M	A	P	L	E	C	A	T	A	L	P	A
X	S	L	O	S	S	O	C	E	D	A	R	G	K	F	O
E	W	M	H	B	H	P	B	U	T	T	E	R	N	U	T
L	E	U	T	G	B	L	A	C	K	W	A	L	N	U	T
D	M	P	I	W	Y	A	P	P	L	E	D	D	N	O	F
E	H	I	C	K	O	R	Y	M	U	L	B	E	R	R	Y
R	A	N	C	O	T	T	O	N	W	O	O	D	B	T	H
P	K	E	B	A	S	S	W	O	O	D	H	O	L	L	Y



BIRD WATCH ACTIVITY

1. Early on a spring morning when light begins to dawn, many birds awaken hungry. Nocturnal animals go into hiding to rest during the day while other animals awaken to begin another day of activity. What are some activities you might expect a bird to do during the day?

   _____ _____ _____

   _____ _____ _____

2. Listen very quietly to the symphony of sounds around us, and try to interpret the repeating sounds. (Example: A quail's whistle can be interpreted as "bob white.") List some of the different sounds you hear:

   _____ _____

   _____ _____

3. Watch for the location of the birds. How many different birds do you see in the: _____ canopy? _____understory? _____ on the ground?

4. Select three different birds and watch them carefully. Complete the identification list on each bird:

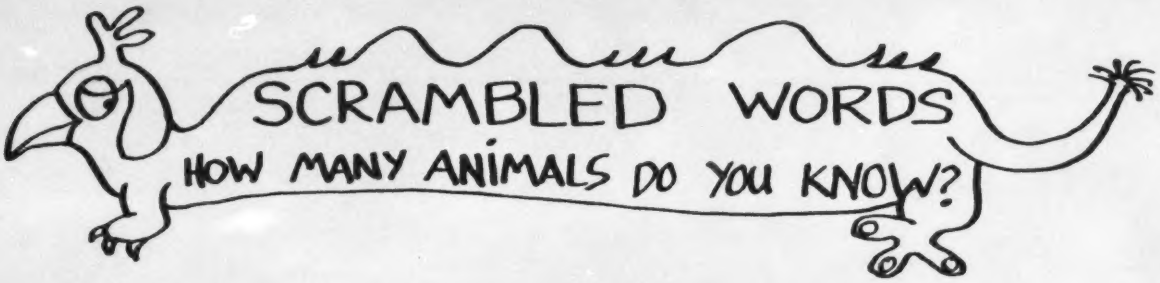
	Name of Bird	Color	Size (Compare it to something you know.)	Beak size and shape
a.	_____	_____	_____	_____
b.	_____	_____	_____	_____
c.	_____	_____	_____	_____

5. What are some kinds of food birds might find in this area?

   _____

   _____

PLANT		ANIMAL	
A	_____	A	_____
B	_____	B	_____
C	_____	C	_____
D	_____	D	_____
E	_____	E	_____
F	_____	F	_____
G	_____	G	_____
H	_____	H	_____
I	_____	I	_____
J	_____	J	_____
K	_____	K	_____
L	_____	L	_____
M	_____	M	_____
N	_____	N	_____
O	_____	O	_____
P	_____	P	_____
Q	_____	Q	_____
R	_____	R	_____
S	_____	S	_____
T	_____	T	_____
U	_____	U	_____
V	_____	V	_____
W	_____	W	_____
X	_____	X	_____
Y	_____	Y	_____
Z	_____	Z	_____



Each group of letters spells the name of an animal. Unscramble the letters and write the name of the animal on each line.

1. ebe _____
2. tan _____
3. owrm _____
4. brac _____
5. lacm _____
6. arfistsh _____
7. pwas _____
8. ylfesuoh _____
9. isqud _____
10. sielf _____
11. ketricc _____
12. sincet _____
13. ebelte _____
14. itme _____
15. uskomll _____
16. toprozoa _____
17. ratcuscaen _____
18. bbegud _____
19. chraandis _____
20. tharpoord _____

(PLANT AND ANIMAL POND DISCOVERY)

Investigate the following to discover the answers to the questions below.

1. Can you find any evidence of plant-animal relationships? You will need to look closely for partially eaten plants, and plants that provide shelter. You may look both in the water and on the bank. Describe your findings below.

   a. _____

   b. _____

   c. _____

2. How many different kinds of plants can be found? (Record present location with your group along the edge of the pond.)

	Number
a. floating on water	_____
b. floating underwater and attached to the bottom	_____
c. floating on the water and attached to the bottom	_____
d. growing along the banks of the creek	_____
e. of which kind do you find the most? a b c d.	_____

3. Is this pond healthy? What are some evidences that there is some pollution or no pollution?

   _____

   _____

4. In a pan or container place dead leaves and other debris from the pond bottom and pick the pieces out one by one. Examine each for eggs, animals, and other items of interest. Record what you find below by drawing or describing. Beside each item write whether it is a producer, consumer, or decomposer.

PARENT POST-CAMP QUESTIONNAIRE

PARENT'S NAME _____ SCHOOL _____

1. Was this the first time for your son or daughter to be away from home? _____ Away from relatives? _____
2. What things has he/she talked about favorably? _____

_____

3. What things has he/she talked about unfavorably? _____

_____

4. Did your son or daughter comment about being homesick or scared?

_____

5. Do you feel the camping experience was too long? _____

_____

6. Did your son or daughter eat any food he/she had not eaten before this camping experience? _____ If yes, what? _____
7. Would you recommend this program for other students?

_____

8. Do you have any suggestions which might make such a camping experience more effective? _____

_____

9. Do you feel that your son or daughter profited from the camping experience? _____
10. Comments _____

_____

_____

_____

STUDENT POST CAMP QUESTIONNAIRE

Name _____ School _____

Dates camp was attended _____

1. What did you like most about camp? _____
2. What did you like least? _____
3. What did you learn at camp that you did not know before? _____
   _____
4. Did your camp experience help you understand some of your school work better? ____ If yes, which subjects? _____
5. Did you discover anything new about getting along with other students? _____ If yes, explain. _____
6. Did you learn anything at camp which can help you take care of yourself or others more safely? _____ If yes, what? _____
7. Did you find out any new things about your teacher at camp? _____ If yes, what? _____
8. Did you take part in any unusual experience, such as an exciting adventure or something you will never forget? _____ If yes, what?
   _____
9. Were you afraid of anything at camp? ___ If yes, what? _____
10. Were you able to overcome your fear? _____ Why or Why not? _____
    _____
11. Do you feel more confident about yourself and the things you can do after visiting camp? _____
12. Do you feel more comfortable outdoors than you did before you went to camp? _____ If yes, why? _____
13. List the activities you participated in order from your favorite to the least favorite. _____
14. If you could change one thing, what would you change? _____
    _____

ANSWER KEYS

Animal Classification

A. Mammals:
- Chipmunk
- Bat
- Otter

B. Birds:
- Eagle
- Heron
- Wood Duck

C. Reptiles:
- Snake
- Lizard
- Turtle

D. Amphibians:
- Frog
- Tadpole
- Salamander

E. Fish:
- Bluegill
- Largemouth Bass
- Crappie

Nature Scramble

1. campfire
2. tree
3. marshmallow
4. leaf (accept flea)
5. cabin
6. safety
7. twig
8. acorn
9. hike
10. smoke
11. food
12. snake
13. turtle
14. hawk
15. river
16. flash-light
17. match
18. soap
19. deer
20. fossil
21. cave
22. animal tracks
23. nature
24. path
25. maple

The Names of 25 Trees

1. aspen
2. red bud
3. hemlock
4. oak
5. willow
6. cherry
7. dogwood
8. beech
9. red maple
10. catalpa
11. cedar
12. butternut
13. black walnut
14. apple
15. hickory
16. mulberry
17. cottonwood
18. basswood
19. holly
20. box elder
21. pine
22. yellow poplar
23. locust
24. birch
25. ash

Animal Crossword Puzzle

Down		Across	
1.	shrimp	3.	mother
2.	ant	5.	frog
3.	many-celled	10.	protozoa
4.	invertebrates	11.	butterfly
5.	fly	12.	arthropod
6.	goat	13.	spider
7.	scorpion	14.	arachnids
8.	insects	15.	worm
9.	starfish	16.	tick

How Many Animals Do You Know?

1. bee
2. ant
3. worm
4. crab
5. clam
6. starfish
7. wasp
8. housefly
9. squid
10. flies
11. cricket
12. insect
13. beetle
14. mite
15. mollusk
16. protozoa
17. crustacean
18. bedbug
19. arachnids
20. arthropod

LIBRARY MATERIALS SELECTION AND ADOPTION PROCEDURES*

(Revised October 14, 1980—Directive 81-1579-OP)

Objectives

The primary objective of the local school library media center is to implement, enrich, and support the instructional program of the school. The school library media center should contribute to the social, intellectual, cultural, and spiritual development of the students.

Selection

Materials for the school library media center should be selected by librarians in consultation with administrators, specialists, faculty members, students, and parents. Reputable, unbiased, professionally prepared selection aids should be consulted as guides.

Criteria for Selection

Selection should consider the needs of the individual school based on a knowledge of the curriculum. Consideration should be given to the needs of individual students based on a knowledge of young people at various stages of development. Selection should provide for a wide range of materials on all levels of difficulty, in a variety of formats, with a diversity of appeal and with different points of view. The instructional materials should have literary merit and interest appeal. All media should be acceptable in format and technical quality.

*Developed in compliance with JCPS Policy IIAC

REEVALUATION OF MATERIALS PROCEDURES *

(Revised October 14, 1980—Directive 81-1579-OP)

Individuals, organizations, or groups who challenge or criticize instructional materials shall be asked to complete the form *Citizen's Request for Reevaluation of Material.* The complainant shall submit the completed form to the local school principal. A committee composed of a classroom teacher, the principal, a regional content specialist, the library media specialist, and the complainant shall review the written criticisms and attempt to reach a decision concerning the complaint.

If a decision is not reached which is satisfactory to the complainant, the principal shall request the Deputy Superintendent for School Programs to delegate a central regional committee to review and make a final decision concerning the disposition of the complaint. This central committee shall be composed of a central office administrator, a regional staff person in the subject area under question, a classroom teacher in the subject area, the Director of Library Media Services, and a parent, preferably from the region from which the complaint originates. No member of the central committee shall have been a member of the local school committee. The decision will be reported to the principal by the Deputy Superintendent for School Programs.

The materials involved shall have been withdrawn from general circulation and use pending a decision in writing by the central committee.

However, in the event the complainant does not concur with the decision, the complainant may request that his/her child be excused from any contact with the objectionable subject matter. Such requests will be honored.

The local school office and the school library media center shall have copies of the form *Citizen's Request for Reevaluation of Material.*

*Developed in compliance with JCPS Policy IIAE

CITIZEN'S REQUEST FOR REEVALUATION OF MATERIAL*

Type of Material ____ Book ____ Filmstrip ____ Lecture ____ Film ____ Record ____ Other

Author (if known) _____

Title _____

Publisher (if known) _____

Request initiated by _____

Telephone _____ Address _____

Complainant represents:

____ self

____ organizations (Name) _____

____ other group (Name) _____

1. To what in the material do you object? (Please be specific.) _____

2. What do you feel might be the result of exposure to the material? _____

3. For what age group would you recommend this material? _____

4. Is there anything good about this material? _____

5. Did you inspect all of this material carefully? ____ What parts? _____

6. Are you aware of the judgment of this material by critics? _____

7. What do you believe is the theme or main idea in this material? _____

8. Which of the following would you like the school to do with this material?
   - ____ Refrain from assigning it to your child.
   - ____ Withdraw it from all students.
   - ____ Refer it to the committee for reevaluation.

9. In its place, what material, if any, would you recommend that would convey as valuable a picture and perspective of our civilization? _____

Signature of Complainant _____

*Jefferson County Board of Education Request Form